

James Sims

OBSERVATIONS
ON
EPIDEMICAL DISORDERS,
WITH
REMARKS
ON
NERVOUS AND MALIGNANT
FEVERS.

By JAMES SIMS, M. D.

THE SECOND EDITION ENLARGED.

Cum supremus vitæ meæ instabit dies, confido mihi adfuturum alacrem in præcordiis testem, me non solum ægrorum omnium, cujuscumque demum sortis, qui sese curæ meæ concrediderant, summa fide ac diligentia salutem procurasse (quorum interim nemo a me alias tractatus est, quam ego memet tractari cuperem, si mihi ex iisdem morbis ægrotare contingeret) verum etiam, pro ingenii modulo, omnes animi nervos in hoc intendisse, ut si quo modo fieri possit, morborum medela post cæteros meos majori cum certitudine administraretur.

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MDCCLXXVI.

OF STEAK AT FORK

FEEDING OF DISORDERS

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P R E F A C E.

SINCE the art of printing with a noble profuseness has scattered knowledge and liberal sentiments to the most distant regions, publications have become so frequent that an author thinks it proper at present to apologize to the public in a preface for daring to step forth in print; and indeed if that was ever necessary, to a world who receive with complacence even unsuccessful attempts to instruct, it would appear so in the Author's case; the medical list having of late increased so enormously by new writings. Most of these however either proceed upon a system or arrangement planned in the closet; or, where they consist of observation, seldom go beyond a case or two; or in fine consist of numberless experiments which are entirely useless, as the Author thinks it will every day become more evident that no conclusion can be drawn from them to any thing which happens in a living person. He has therefore endeavoured to recover the old tract of careful observation, which he thinks has been too much forsaken since the days of Sydenham. He is afraid indeed this deviation has not been sufficiently perceived, and that many persons who wished to increase useful observations rather than hypothetical systems, imagined themselves demonstrating the elements of practical medicine when shewing the effects of fermentation upon different substances, &c. whereas in reality these trials might with as much propriety and much greater safety be styled the elements of music or navigation. Medicine is a matter of too serious import to be built upon conjecture, and what fate must more remote analogies

have, when we see that experiments made upon any other animals will often succeed differently in man, nay that the human body is so wonderful a machine, that we shall frequently be deceived if we suppose an application or medicine to have a similar effect upon it in health and in sickness, The known variety of disorders, the new ones brought on by different manners of life, and the change introduced into the old by the consequent alteration in our constitutions, require the uninterrupted attention of physicians to point them out, with the new methods in the practice, which necessarily arise from thence, and which have been unjustly branded with the name of fashions. The boundless knowledge of nature is not to be acquired in one age, nor by one set of observers; even the description of her more steady performances is not yet complete, and in others she seems often delusively to sport with the understandings of her admirers. In none does she give stronger instances of these frolics than in the human frame and its affections. The testimony of a few authors therefore is not sufficient to establish any one medical fact, especially as we sometimes find others who contradict it. By comparing the number of these, and their sagacity, we can only form a judgment of the credit due to an opinion: but unfortunately we often cannot make this comparison; the method of copying from one another has ever been so prevalent among writers, that a fact may appear supported by a number of evidences, when in reality it depends upon the authority of one, perhaps superficial observer. In this view a practical work may be truly valuable even though it contains little more than a confirmation of what has been advanced by preceding writers, but a person who thinks he has observed any thing

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thing new and useful to mankind is inexcusable if he does not communicate it to the world.

The Author of the following pages hopes to escape censure for having endeavoured to give an account of disorders, as he saw them in the glass of nature, not as reflected by other writers, together with the treatment which he found proper for each, without any reference to idle speculative hypotheses or preceding opinions. In doing this, he has been almost as attentive to the practice of other physicians, who bordered upon him, where he could have an opportunity of seeing it, as to his own; thinking that practitioner who observes diseases only under his own management, as dangerous as he who reads but one book or one system: he will ever get into a beaten circle, and often mistake for natural symptoms, those which are only consequences of his method of treating the distemper. Nor can a person be certain what credit any particular management deserves in a disorder, without seeing the disadvantages of others, and also whether nature of herself would not perform a cure; from the want of considering this last circumstance, many insignificant medicines having often gained a character.

Was the Author writing to a less candid and enlightened age, he should perhaps need an apology for quoting the practice and medicines of those who are reputed quacks, thereby seeming to pay them too much attention and hurt the learned regular professor of the art: but he cannot think knowledge ever too dearly bought, not even from illiterate persons, its radiance is too bright to be sullied by any hand through which it may chance to pass, their meanness can never adhere to it.

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He has been very sparing in drawing general conclusions; those which are not obvious might perhaps be ill founded, and as to the remainder he thinks the person who requires them should not read any book on medicine. As to the practice, he is too sensible of the importance of a medical fact, to venture any in the following work but what he has seen confirmed by repeated experience. The basest of men, who by private or open violence commit murder, seldom attack more than the life of a single individual, whereas the physician who pawns a false practice upon the world may have the lives of thousands to answer for, and continue to murder even in his grave. Truth to other men is the point of honour, to a medical writer it is sacred, inviolable, it is religion itself.

In the latter part of the work the author intended to have given remarks on fevers in general, but a very bad state of health has frustrated this design, and obliged him to confine himself to two species, which he has chosen out because he fears the common practice in them is mostly improper.

London,

March 17, 1773.

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OBSERVATIONS

O N

EPIDEMICAL DISORDERS.

CHAPTER I.

DISSERTATIONS on epidemical disorders have been always held in higher estimation by practical physicians, than those which treat of any other part of medicine. The reasons for this preference may not be unworthy our attention. Whenever a disorder takes an universal sweep over a country, the numberless opportunities which a physician enjoys of seeing its various stages and circumstances, and of comparing the success of all the different modes which the hand of humanity will practise for its relief, leave

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small room for a candid person to err in. He must indeed be little interested for his patients, and proudly wedded to his own opinions, who having fallen into a wrong method at the first, can yet persist in it, against the evidence of bad success, and the many gleams of a better way which must unavoidably force themselves upon his sight. That there have been some who have endeavoured to palm the errors of their vanity instead of truths upon the world, I will not deny ; but he only who wishes to satirize our profession, will venture to assert that there have been many such instances. In other disorders which occur singly and seldom, the practitioner may mistake those symptoms and that successful method of cure, which are derived only from the particular circumstances and constitution of the patient, for the true symptoms and method of cure of the disease in general : but in epidemics the leading symptoms are ever too strongly marked to admit of such a mistake. The causes also
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of epidemics seem to pay little regard to the particular constitution of each person, inasmuch as scarcely to vary their appearance though they attack persons of as different ages, temperaments, and manners of life, as can be conceived. It is for this reason that we need seldom lay down more than a few of the most material symptoms attending each epidemic, and that the general method of cure admits but small variations on account of different circumstances in the patient.

Acute disorders differ in this from chronic ones, that they often totally vary their appearances in different years; and even where there cannot be any great variety perceived in the symptoms, the treatment proper to them in different seasons is sometimes almost opposite. From not being aware of this circumstance, systematic writers have created the greatest confusion in medicine, by throwing promiscuously together all the symptoms which are ever seen in a disorder. Even old practitioners

have fallen into this mistake by endeavouring to shew us in one view the result of many years experience, whereas I will assert, that the science would have profited much more, had they given us an account of their observations every year, or at least at the end of every constitution. Was this plan followed, how much sooner should we have a complete history of disorders and their cure, than in the present method, wherein every writer endeavours to limit the practice by his own narrow experience? From the want of this being sufficiently attended to, we likewise find such daily complaints of acute disorders not occurring as they have been described by authors; and many physicians who are too indolent or immersed in theory to enquire into the real cause, satisfy themselves by thinking it arises from a different temperament in the patient, or complication in the disorder, to which I am convinced it is owing much more seldom than commonly supposed. For these reasons I have attempted

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tempted to describe disorders and their treatment as they occurred to me in each particular season, and hope I shall be thought qualified to do this with equal accuracy, as if a century was added to my experience.

Was I to reason abstractedly as to epidemics, I should suppose that every constitution impressed some particular stamp upon all the disorders which occurred during its continuance, and as this favoured a particular disorder, that of course became more frequent and remarkable, and was therefore distinguished as the epidemic of the season. It is for this reason that it not only serves to give a clearer idea of them, but by them it is likewise elucidated, nor have I found any better way to judge of a disorder, when it first appears, than by an exact survey of all the concomitant ones. As to prognostics likewise, I have always found the rules of Hippocrates very uncertain in this climate, whereas those drawn from a knowledge of the epidemic then

reigning, feldom failed. From not attending sufficiently to this circumstance I have known some physicians led into great errors, pronouncing those to be in no danger who have died in a few hours. For my own part I ever doubted those cases wherein the symptoms appeared in general much milder than I should have expected from the known nature of the disease, and the violence of the occasional cause, especially where some appearances seemed to point out a greater degree of danger.

It must be always remembered by the reader that nothing is farther from my intention than the giving a systematic view of distempers. A historical account of such things as occurred to me in the practice is the only thing aimed at, nor have I been at all anxious to quote the opinions of authors who either agree with or differ from me. Though I have ever made it a rule to read upon each disease when I had it before my eyes, yet dressing a book in these foreign plumes seems to me very absurd, an exact agree-

EPIDEMICAL DISORDERS. 7

greement with nature being the only beauty for which in the end it will be admired.

Most authors describe a regular process for the physician to follow from the beginning of a disorder; but he is often only called in at the close, when no part of the foregoing has been practised, and the symptoms from mismanagement have become anomalous; these circumstances I have all along endeavoured to point out.

The county of Tyrone, where the following observations were chiefly made, is situated in the center of the northern part of Ireland. It is bordered on the south for an extent of twenty miles, by a river which during the winter months lays the neighbouring grounds under a deluge of water; on the south-east lies the greatest lake in the kingdom: in the midst of it a vast ridge of mountains raise their bleak heads, from whence arise many overflowing rivers; and it is every where interperfed with large tracts of low boggy ground.

Even the soil of the hills is generally cold and wet, by which means the inhabitants are forced upon a toilsome laborious life to earn a scanty subsistence. As much rain falls in this place as perhaps in any part of Europe, especially during the winter and spring, which are beyond comparison the most unhealthy seasons of the year. The disorders which prevail here, are mostly such as might be expected in so moist a climate, where the air is perpetually changing its temperature, and although it does not attain the degrees of heat and cold known in other countries, yet the suddenness of the variations affects the human body more than those extremes to which by long and insensible gradations it is rendered familiar. The rheumatism, scrophula, and other eruptions commonly called scorbutic, are peculiarly endemic here, few persons being entirely free from them. Dysenteries and pthises are also very frequent. In all feverish disorders, the first complaint which is usually told to the physician

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fician is a weight and oppression about the heart.

This short description was thought requisite, for in some cases the general constitution of a country is equally necessary to be understood by those who wish to reap benefit from remarks upon its diseases, as that of any particular person is by the physician who prescribes for him. The want of sufficiently attending to the difference of climates has been the source of many mistakes and disputes in physic: thus an Italian physician decries vomits, whilst an English one praises them highly; both perhaps with the utmost propriety as to their native country. The folly is our constantly endeavouring to fix our partial observations as the standard of practice over the globe: as well might we suppose that the plants of the Torrid Zone would flourish by a similar culture in Greenland, as that disorders would require a similar treatment in each place, though called by the same name.

From

From the year 1751, until 1761, the seasons were cold and wet, not one agreeable summer intervening to enliven the dreary prospect. During this whole period, disorders revelled with unbridled fury, coughs and catarrhs appearing in the winter, agues in the spring, dysenteries and cholera morbus in the autumn, and low putrid or nervous fevers throughout the year. To the unhealthiness of these years the bad state and dearth of provisions might not a little contribute; the poor being incapable to procure sufficient sustenance, were often obliged to be contented with things at which nature almost revolted; and even the wealthy could not by all their art and power render wholesome those fruits of the earth which had been damaged by an untoward season.

The years 1761 and 1762 however proving remarkably dry, these disorders abated; and agues in particular seemed entirely

EPIDEMICAL DISORDERS. II

tirely to take their flight, as since the year 1764 I have not seen a single regular intermittent. Sometimes, indeed, those persons, who had formerly suffered much by this disorder, either in the West-Indies or the fenny parts of England, would have flight uncertain returns of it in the spring and autumn, especially during wet years; but no art could bring it to be regular, though many methods were tried with some whose constitutions seemed to require it. The years 1763 and 1764 were variable, but rather moist than otherwise. They were not rendered remarkable by any peculiar epidemic, disorders adapted to the different seasons of the year, following each other in their usual course.

CHAP.

CHAP. II.

CONSTITUTION FIRST.

AFTER a most stormy wet winter, attended with but little frost, dry easterly winds began to blow about the 25th of January 1765, and continued until the 20th of February, during the last ten days of which they were accompanied by frost. The wind then veered about to the west, and was attended with considerable rains until the vernal equinox, from hence the season became remarkably fine, the wind suddenly changing to the eastern and northern quarter from whence it continued
to

to blow for about six weeks ; and though it afterwards inclined more to the west, yet few remember a drier and more agreeable summer or autumn, and even the months of October, November, and December were remarkably dry, some gentle frosts with eastern winds only serving to remind us of the advanced season of the year.

During the first two months of the year 1766, there was scarcely any rain, frost mostly predominating with east and northerly winds, and on the 12th of February, a most extraordinary quantity of snow fell from the north-west. The first 23 days of March were very fine, wind south-east; from thence to the end variable. Very dry agreeable weather prevailed during the next five months, the wind scarcely blowing from any other points than the south and west. On the 27th of August began a most stormy season, wind westerly, which continued with little intermission until the autumnal equinox, at which time the wind changing to the opposite quarter, the weather

weather for a month became very fine. From hence until the close of the year it was variable, slight frosts often giving a short interruption to an otherwise extremely wet season; the wind which at particular times blew with great briskness, continuing chiefly in the south and west. The first 19 days of January 1767, hard frost took place, with frequent falls of snow, wind northerly. The wind then changed to the south and west, attended by variable weather, without a single day of frost, one only excepted, until the beginning of the old year, when becoming easterly, it produced above a month of fair weather without frost. The months of May and June were good with some fine rains interspersed; July cold and rainy, wind south and west.

The spring of the year 1765, was uncommonly healthful, a few petechial fevers, relics of the two former ones were almost the only disorders to be met with, these however scarcely required the assistance

tance of a physician, being without danger; and going off by a profound sleep, which often lasted for many days. This was so contrary to all I had been taught in universities concerning the malignancy and danger of petechial fevers, that I must own it served to puzzle me not a little. The first patients which I met with in the disorder being covered with these spots, I became alarmed for their safety; but not exactly knowing what course to take, I resolved to leave the matter entirely to the conduct of nature. This I accounted better than, by pretending to assist where there was no certain indication pointing out what was to be done, to run the hazard of counteracting any of her operations. I was more confirmed in this method during the continuance of the disease, by never observing any other dangerous symptoms accompanying it; the pulse remained throughout tolerably full and regular, the breathing easy, head free from delirium, thirst not great, and neither skin nor tongue
very

very dry. As the inclination to perform too little is not in general to be objected to the medical tribe, so I have known some low retainers to it, who by blisters and cordials endeavouring to rouse their patients from this comatose state brought them into imminent danger. It is true they acquired more honour afterwards by recovering some persons from a situation almost despaired of, but the traffic is a disingenuous one, below any person of a liberal mind, and it is besides very unsafe, as in some time people must perceive that the patients of nature come easier off than those of the doctor.

After the vernal equinox on the sudden shifting of the wind from the west to the opposite quarter, some instances of the true phrenitis were to be met with. Immediate and profuse bleeding is the only method of combating this furious malady. It often happens however, that the hands of the physician are tied up from drawing

a sufficient quantity by a mistaken tenderness of the sick man's friends. I would therefore recommend opening the temporal artery in preference to any other part. Drawing twelve or fourteen ounces from this, will have a greater effect than perhaps thirty from the arm: and in some instances which I have seen, the delirium has abated immediately, the fierce, protruded, blood-shot eyes have become placid, and the patient has fallen into a calm sleep, from whence he awoke beyond the reach of danger. As to the operose bandages used in this case, I would reject them all. A shilling folded in a linen compress, and tied firmly upon the orifice, where it must be suffered to remain for a considerable length of time, answers all their good purposes without alarming the bystanders by any unusual preparations, which would always have a disagreeable effect upon their minds. This compress has likewise another advantage, that it will not be so readily driven out of its place in any struggles

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which the patient may make during his delirium; and even if it should, the attendants can with more ease fit it on again, than a bandage the mechanism of which they do not understand.

Persons who had lived a very free life, especially such as had indulged in the immoderate use of spirituous liquors, were liable to this disease. In them it mostly proved a disgrace to the physician, death on the third day baffling all his efforts. Their eyes were generally to the last degree fierce protruded and inflamed, tongue dry, skin hot, delirium amounting to phrensy, and their pulse as hard as a piece of wood, yet in these circumstances I have seen them sink under a single bleeding of ten or twelve ounces, and expire in less than an hour. This was the point which gave me no small disquiet, finding myself precluded from what I looked upon to be the only means of lessening the violence of the inflammation. Indeed their pulse, together with its hardness, had rather a contracted feel, but their blood was extremely

tremely fizy. All those who passed the fourth day usually recovered; these were mostly such as took the disorder immediately after a particular debauch; such as to this superadded an exposure to cold air, died. Antimonials had no good effect, and blisters or synapisms proved eminently hurtful, as were also any heating things. Wrapping the lower parts of their body in flannels, wrung out of warm water, was most serviceable: after the application and renewal of these for a sufficient length of time, the pulse became softer, the delirium lessened, and a kindly moisture appeared on the skin. If the disorder afterwards took a turn for the worse, it became necessary to repeat the application; every other method to procure a sweat proving very prejudicial, insomuch that I have seen some of the afflicted die in the utmost rage during a most profuse one. Acids in large doses were always serviceable in this disease; but unluckily the patient often refused to take them, or indeed any other medicines

dicines, with a surprising obstinacy; their taste likewise was not at all depraved, so that they quickly perceived and resented any attempt to impose disagreeable things upon them.

Bilious complaints were not unfrequent during the autumn, but as they raged with greater violence in the following year, any remarks upon them will come in with greater propriety at that period.

The beginning of the year 1766 was like the former, very healthful, few inflammatory diseases appearing, tho' the legitimate offspring of the season. In July a bilious cholic began to rage, which as August advanced, was joined by the cholera morbus, and afterwards by the iliac passion.

The bilious cholic often began by a pain about the anterior end of the shortest rib, the patients felt a great coldness all
over

over them, but especially in the extremities, their pulse was low and unequal, and they were exceedingly restless and anxious. When these had lasted for some hours with increasing pain, a vomiting came on, at first of greenish sour stuff, afterwards of what was highly yellow and bitter. On the stomach having evacuated a large quantity of this, the pulse rose, and became hard and quick, the tongue foul, thirst great, and the pain seemed now principally seated in the stomach. After the disorder abated, which when left to itself, was mostly by bilious stools, a great soreness remained in the abdomen, as if the patients had been bruised, their countenance and eyes were yellow listless and dejected, their appetite gone, and a bitterish taste in their mouth. It was generally brought on by exposure to cold air so as to be effectually chilled, in which case the symptoms did not appear for hours, sometimes a whole day. Women just past middle age were very subject to it, and in them after

repeated attacks it was apt to degenerate into a fatal iliac passion. If the vomiting or purging were prematurely stopt by opiates or astringents, this last disorder sometimes followed ; at others, a very high degree of fever, lasting until a copious discharge downward was procured. Astringents in diet, such as cyder, pickles, &c. sometimes gave immediate rise to the complaint. Some were perceived to droop a day or two before the attack, in which case, if they were young, swallowing a large quantity of fresh lemon juice frequently obviated it; in others where it seemed to arise from costiveness, a vomit or laxative had the desired effect. The dejection of spirits, and complaints of a sickness and load about the heart and stomach, were in some persons much greater than the pain attending the disorder, the heat and feverishness variable and remittent; together with a tension of the abdomen, and its not bearing pressure with the hand, which were always bad signs.

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When the bilious stuff lodged in or near the stomach, the pulse was small and intermitting; but when the peccant cause had passed farther onward, became much fuller and stronger. In both cases the patient bore bleeding well; and in the last a repetition of it was often necessary. The former of these cases, I think, as well as some of an iliac passion which I had the misfortune to see, attended with a low pulse, should make us cautious of allowing a weak pulse to deter us from drawing blood in these complaints. Wherever there is the smallest apprehension of inflammation, either present or future, it should not be omitted. Nor have I ever failed to direct it in such cases, without reason to repent it afterwards. These disorders of the stomach and bowels are too rapid to admit long time for deliberation, and whatever is to be performed, must be done immediately. As to a second bleeding, the case is otherwise. The first, if judiciously applied, and followed by proper medicines, generally abates the dan-

ger of mortification, which in these parts of the human body, always treads close upon the heels of inflammation. And here I cannot help mentioning with regret, my having heard it inculcated by a very old professor of medicine, in conformity with Boerhaave's 951st and 962nd Aphorisms, that a hard full pulse was the only true mark of inflammation in the stomach and bowels. This doctrine, if generally received, might, I apprehend, be productive of much mischief, as I can safely assert, that most of those cases which have fallen under my inspection, were attended with a weak quick and unequal one, especially where the stomach was principally concerned.

The next thing attempted, was to evacuate such corrupted bilious stuff as had been collected in the stomach and duodenum. That this was done most properly by vomits, few can doubt, any attempts to carry it downward only detaining it so much longer in the system. Yet in their
use

use caution was necessary, as wherever any symptoms of inflammation, or an inverted peristaltic motion appeared, the gentlest that could be exhibited proved always hurtful : in such cases laxatives were the best evacuants.

Whenever, from part of the peccant matter having made its way into the bowels, which mostly happened after the use of vomits; or when, for the reasons above mentioned, purgatives became proper, mild ones appeared most useful ; the irritation occasioned by any medicine being here a capital consideration. Nor can I avoid expressing my surprise at Sydenham's practice in the iliac passion, wherein he prescribes twelve grains of scammony or resin of jalap, with a scruple of calomel. These heating cathartics appear ill adapted to any degree of inflammation. In this disorder therefore, or in the bilious cholic, which in his description are scarcely to be distinguished from each other, I always preferred the neutral salts, for their cooling qualities; cream of tartar, on account

count of its acidity; or oleum ricini, as being a relaxant. Where on account of their volume these could not be expected to lie upon the stomach, a little jalap mixed with white sugar and reduced to the finest powder, often proved a most efficacious purgative, without ruffling the system so much as might be expected. Another part of his practice in these distempers seems to me not very safe, that is the frequent use of opium. It is true this medicine must be sometimes given, where we would otherwise wish to avoid its use, to procure a cessation from those enormous vomitings which prevent any other medicines from being retained long enough to exert their efficacy. At another period likewise it is of notable use; when the whole cause of the disorder has been carried off by preceding evacuations, nature often much exhausted requires something cordial and strengthening, and the stomach which is grown too tender may find whatever blunts its sensations serviceable. At these times

times opium should be given ; but in more than one instance which I have seen, where it has been ordered in Sydenham's method, to quiet the disturbance raised by a cathartic, a relapse has been the consequence, to which these complaints are very liable, and which may have been owing to part of the peccant matter being still confined within the body. My design, in hazarding these free reflections upon the practice of so great a man, will not, I flatter myself, be misinterpreted ; as it appears evident that any mistakes in him, if such they are, must be more prejudicial to mankind, than those of numberless other writers.

These disorders appearing with any degree of frequency but at one other time during the period comprehended under these observations, which was in July and August 1772, I shall here mention all that occurred to me at that time. In the iliac passion, the semicupium has a good effect in abating the pain, and enabling the stomach

mach to retain medicines. The patient should not be removed out of it until in danger of fainting ; nay I have some reason to believe that in two cases where that accident happened, it contributed not a little to the consequent amendment. It was before remarked, that this disorder was apt to return ; one instance of which I had the unhappiness to see in a young man about fifteen years of age, who, after the use of proper remedies, gave the most pleasing hopes of a perfect recovery ; the pain having ceased, and a free passage downward being procured, he took a violent inclination for a draught of cyder, which, at his earnest request was given to him by the attendants, who had before seen him allowed ripe apples without any inconvenience ; but he had no sooner swallowed it than the pain and vomiting returned, and in a few hours proceeded in spite of all remedies to its fatal termination.

All the methods however hitherto proposed for combating this atrocious disease
have

have so often failed, that I know not whether a deviation from them might not be very justifiable. The way which I would propose is, after a sufficient quantity of blood has been drawn, by a great load of bed cloaths to endeavour forcing a profuse sweat. In this case I have no doubt of the pain abating considerably; and the stomach during its continuance would most probably retain whatever medicines were prescribed, agreeable to what Sydenham remarks in the pestilential fever, which was attended with the greatest vomitings. This sweat might of itself do much toward completing the cure; but although it did not, we should still gain time by it, to administer laxitives, in a much safer way than can be procured by opium, which so greatly counteracts their operation. The success of sweating in the pleurisy, and other inflammatory cases, may give greater expectation to this method. This proposal must be understood only to refer to those iliac passions which do not arise from a strangulation of the

the intestines by any mechanical cause. Herniæ I am convinced, very often bring on this disorder, great care should therefore be taken to enquire into this circumstance, as nothing can obviate the complaint, and save the patient's life, but their reduction.

The treatment of the cholera being well known, it need only be mentioned, that the use of the bark, or some other strengthener, was often necessary after it had ceased. I have seen instances, where, after continuing for some time, it has degenerated into a bilious dysentery, when contrary to expectation, an antimonial emetic has to all appearance rescued the person from the jaws of death.

As to the operation of this medicine however, it is necessary to remark, that whenever bile was collected in the primæ viæ I have seen it act with considerable violence even in minute doses. Whether this was owing to any solvent power in the bile acting upon the semimetal, or that the
colluvies

colluvies having once found an exit, persisted in the same course after the force of the medicine was spent, I shall not decide, but should be inclined to the latter, from having observed the same thing to happen in putrid cases. Whether antimony ever becomes more active on account of meeting an acid in the stomach, I will not take upon me absolutely to determine; but this I can assert, that in the practice I never met with reason to suppose it founded in truth, and am afraid that it is founded no where but in the heads of some theoretical gentlemen. We mostly indeed see antimonials act in proportion to the weakness and sensibility of the stomach, but this we can often determine previously; these gentry must then assert, that acidity always prevails in a weakened stomach, even when it shews no one symptom of it; as I will venture to say, that I have met with an hundred weakened stomachs and digestions which shewed no sign of any acid. By the foregoing observation,

servation of their uncertainty, the use of antimonials in bilious cases is not intended to be forbidden, on the contrary I am convinced no other medicine can pretend to the same merit in evacuating bile, but the dose must be cautiously regulated by a skilful person. Most physicians think they do this by a medicine, when they order it to be divided into small doses, and and given at intervals until it shall begin to operate; but experience has shewn me that this method is very liable to error. An emetic given in this way seldom fails to purge; and a purgative often lies quiet until so much is taken as will act with a briskness little intended by the prescriber. Perhaps the best practice is to give so much at once, as from a consideration of all circumstances shall be thought equal to the effect proposed; and if the operation should seem to exceed proper bounds, opium may be employed to check it, which it will do with greater safety than in the other way, where the part of the medicine last swallowed

lowed, may not as yet be completely dissolved, nor have begun to exert its force. It must be acknowledged however, that the case before us is one of those wherein small doses of antimonials frequently repeated are often most proper and beneficial, but then they are given in that way for a much more important reason than merely regulating their dose.

Persons subject to bilious disorders should not only be particularly careful of over-heating themselves, but likewise to avoid taking cold, from which last they seem to me more endangered than any other constitution, their feverishness always rising much higher. Beer I look upon to be their most proper drink, partly on account of its laxative quality, by which they are kept cool, and from having observed a bilious constitution often succeed a constant use of cyder, which in this kingdom is rough and austere. They who drink much claret are likewise more liable to bilious complaints, than even

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those who indulge in the use of spirituous liquors.

During this constitution, and indeed at various other times, a disorder was frequently seen, which I conjectured to be an inflammation of the liver. The patients were hot, thirsty, restless, and feverish, had a short dry cough, and a pain in the right side affecting the breathing, together with a slight inclination to vomit, especially on filling their stomach with food or drink: they found themselves easiest when in bed. These symptoms occasioned its being often mistaken for something pleuritic or peripneumonic, nor was this error in some respects of very bad consequence. There was no pain in the top of the shoulder, but a most acute one was found at the pit of the stomach on the slightest pressure. This was the distinguishing symptom by which I always discovered the disorder, yet it only shewed itself when the part was pressed upon, so that the patient often did
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not know of it himself until I have made him find it with the point of my finger. This disease generally lasted four or five weeks, even though the urine long before promised a speedier change by depositing a copious red sediment, and after it seemed to be entirely removed, returned in the space of a few months with as much violence as before. Towards the close there was always a very perceivable yellowness on the skin. I have seen persons who had six or eight attacks of it in a very few years.

It sometimes required the letting of blood twice or thrice, which was always covered with a thick inflammatory crust. After bleeding, an operation that never failed proving eminently serviceable, gentle and long continued purging completed the cure. In this the course of nature was exactly followed, as a discharge downward was the constant way which she took to relieve herself, and there was a great quantity of bilious matter always brought off by it. Vomits were remark-

ably hurtful, as were also all heating medicines or diet. The care of the physician did not however cease with the present attack of the distemper, great skill being requisite to prevent its speedy return. The principal attention was to be paid to the bowels in keeping up a gentle lax, which was most properly done by a mild cooling vegetable diet, and avoiding all austere and astringent things. I have known the disease sometimes brought on by a too free use of pickles, excess however in wine or spirituous liquors was a frequent cause of it, as indeed it is of most bilious complaints. Some I had reason to think died of this disease, but as they were not opened, I shall not absolutely determine; it has however frequently given rise to incurable jaundices and dropies.

About the autumnal equinox, bilious disorders declined, giving way to the small pox, that with unheard of havock desolated the close of this year, and the succeeding
spring

Spring of 1767. They had appeared above a year before along the eastern coast of the kingdom, and proceeded slowly westward with so even a pace, that a curious person might with ease have computed the rate of their progress. In this they were scarcely to be interrupted, as appeared by the following instance. The children of soldiers on their march had brought them from other places to some towns here during the preceding summer, and although they were of a malignant kind, the afflicted all dying, and therefore most fit to propagate the infection, yet not one of the inhabitants received them until in their regular progress they had travelled over the intermediate space. As they had not visited the country for some years, numberless subjects were grown up for them to exercise their fury upon, and many blooming infants were just opening to the sun, in vain, since they were so soon to be cropt by this unfeeling spoiler. Of thousands who caught the infection in this and

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the neighbouring counties, scarcely one half escaped, and even of these, some with the loss of one or both eyes, and several with faces so altered, as to be known with difficulty by their most intimate acquaintance.

The disease was attended in the beginning with a remarkably full strong pulse, which gradually increased in quickness, the urine was high coloured, the heat of the skin and thirst soon became great, the eyes red and inflamed, and the whole face flushed; the person lay seemingly stupified with the greatness of the disorder, complaining chiefly of a pain in his back, an extremely violent one, with a confusion in his head, and slight nausea at his stomach. On the second day, especially if he took any heating things, or was kept warm, the pock usually began to appear in the face. The third, fourth, and fifth days numberless pocks appeared; the symptoms however were so far from being alleviated, that the patient who had hitherto
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only complained of a confusion in his head, attended with watchfulness, now became highly delirious, his tongue dry and foul, urine limpid, pulse much quicker and hard, the heat and thirst intense. These appearances continued during the state of maturation, if so it could be called, when the pock never rose but covered the skin with an universal crust. About the ninth or tenth day the disorder in many seemed to abate, the delirium entirely ceasing. The secondary fever however soon arose, which in some lasted for many days: in others the swelling of the face and extremities subsided speedily, the skin became pale, a most excruciating pain seized the head, soon followed by delirium, and the pulse became amazingly quick and low, all giving too true a presage of the fatal termination, which was commonly attended with a great struggle, or heart-working as it is by some not improperly called. It must here be remarked, that an insufferable smell from the pock was not to be

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reckoned amongst the bad symptoms, as from it a favourable prognostic might usually be drawn. As to the time in which death rescued those from misery, who were not able to combat the disorder, it was extremely various : some who had been treated in the warm method, yielding up their breath on the ninth, eighth, seventh, nay so early as the fifth day. These were mostly covered with purple spots, which, though far from being a necessary companion, yet on such management appeared soon after the eruption, and sometimes even along with the pocks. Others on the contrary, who were bled and followed a cooler regimen, lived to the twentieth day or even longer, and afterwards fell a sacrifice to this unrelenting demon. A disposition to sweat in the beginning of this disorder, seldom proved salutary, nor was a diarrhæa more so ; for though I have since that time had good reason to believe, that purging in the beginning of this distemper, when continued for a suffi-

EPIDEMICAL DISORDERS. 41

a sufficient length of time by medicines, has saved the lives of numbers; yet that lax brought on by nature, only shews the abundance of peccant matter in the intestines, but seldom proves equal to the expulsion of it. The ptialism also, upon which many place great reliance, proved equally unsuccessful.

Such were the appearances of the disease during the first months; and the frost of the succeeding January, which many hoped would check its progress, served only to increase its rapid malignity. The fever grew even still more inflammatory, the pulse much harder, the head-ach and delirium more intense, the eyes fiercer, and the termination of the disorder was seldom protracted beyond the thirteenth day. Those persons, who had previous to their being seized by the disorder considerable running eruptions, or what in this country is called the itch, generally came off best, most of them having it in a very favourable way. This observation I had an opportunity

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portunity of seeing again confirmed in the year 1770, from whence I drew a corollary that such persons were fittest for inoculation. Nor was I deceived in having predicted thereby to some inoculators, that a child whom they were afraid of taking under their care on account of this eruption would pass the disorder in an easier manner, than another of the same family, who seemed in better health, and whose skin was perfectly clean. Whether this arose from the drain of humors purifying the blood, or that the eruption shews a healthful disposition in the habit to throw off readily any offending matter to the skin, in like manner as we see a second quantity of small pocks coming out about the eleventh day a certain sign of recovery, I will not pretend to determine. In support of the former opinion, a surgeon to whom I was mentioning the observation told me, that he lately saw a girl in St. Thomas's hospital who had some schirrhous tumors, occasioned by external violence, extirpated; and whilst
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the discharge from the fore yet continued, was seized by the small-pox, which proved of the most benign kind. We likewise observe, that those who take the infection immediately after a salivation pass through the disease very favourably.

As to the treatment of this disorder, all the methods tried in it proved almost equally unsuccessful. Some persons were bled in the beginning, others were kept warm and sweated, and others followed the cool regimen, and used laxatives; some took cordials at first, others not until after the sixth day; large quantities of the bark were given to some during the state of maturation, to others opiates, or claret and water; some were blistered on the secondary fever arising, others were purged, and others took James's powders, and other antimonials; in vain! in vain were most things which the art of man could devise called in to their assistance, the mortality still continued. It is true, those who were bled in the beginning, and treated

ed in Sydenham's, or the cool method, were not hurried out of the world so speedily as those who followed the opposite course, nor did near so many die; yet, as numbers of them likewise perished, there was not sufficient evidence to convince those people of its usefulness, who had been for many years biased in favour of the warm one. And indeed the error of supposing, that medicine could do but little in this disorder when malignant, had almost taken possession of myself, until having an opportunity of seeing a particular method successful in the year 1770, when the small-pox paid us a second visit, I was induced by the strongest evidence to recant that opinion: but of this in its place. Before I dismiss the subject at present, allow me to remark upon the practice of those who recommend the pustules on the face to be opened when at the height, that the contained matter being thereby evacuated, the face may not retain any disagreeable marks. In a favourable

able distinct pock this caution seems superfluous, there being little danger of its leaving any deep impression, and in the confluent malignant kind, when I have seen it practised, it has always given such intolerable smart, as must wound any person not fortified by inhumanity itself; nor was this relieved by any applications of oil or sweet milk, which were sometimes tried for that purpose.

In the year 1767, about the vernal equinox, the small-pox began to decline, giving way to pleurifies and peripneumonies. These chiefly attacking young and plethoric persons, the fever rose very high, requiring large and immediate bleeding. But it often happened, that a physician was not applied to in the beginning, and the patient was suffered without aid to struggle with the disorder five or six days. In this case, particularly if a warm heating regimen had been used, his situation was truly deplorable. All expectoration had now ceased,

ceased, his breathing became laborious, his pulse quick, and to the last degree weak; his eyes dull, his face sunk and ghastly, his skin cold and covered with a clammy sweat, and he was rather insensible than delirious. In such circumstances, the attempting to do any thing, was seemingly running a needless risk of losing the physician's character; yet to desert a poor wounded brother, to whom, or his friends, a few comforting words, or even looks, gave infinite pleasure, required the utmost insensibility. Under these discouraging appearances, antimonials assisted by warm cordial stimulants, have several times brought about an unexpected recovery. The preparation which seemed to have the best effect, was James's powders in divided doses; to these were often added the *sal cornu cervi*, or what seemed to answer better, some opium; and the greatest care was taken that it might go off in sweat, by means of warm drinks, and a greater quantity of cloaths being laid

laid upon the bed, as if it either vomited or purged there was no benefit to be expected: wine was liberally added to the drink, and blisters or synapisms were frequently applied. As the pulse rose, and a sweat came on, if the patient became more sensible, and his eyes clearer, he usually recovered. Doctor Stack, a physician of great worth and ingenuity, lately informed me, that he has experienced the same good effects from kermes mineral, and as the preparation of this is known, it is likely many will be more ready to make a trial of it than the other.

I am sorry to find an opinion lately gaining approbation from the medical world, under the patronage of so eminent a practitioner as the late Dr. Huxham, that there is little difference between the various active preparations of antimony, except as to the dose, and that one may be made to answer the purposes of all. To a theoretical physician this may seem uncontroversible, and to an indolent one may be a
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very convenient saving of the expence and trouble of reasoning, but I am certain it has no just foundation in the practice. True it is, that most of the active preparations of that incomparable medicine when given to a healthy person in a small dose, promote the insensible perspiration, in a larger they procure a sweat, if the quantity is farther encreased they purge, and if yet farther they vomit. It was this striking similitude which gave occasion to the foregoing mistake. But though in a healthy person it may be easy to give the mineral any one of these effects, by means of regulating the dose, and by the prudent addition of other remedies, it is not so in a sick person, where the difference of operation is frequently of no less consequence than killing or saving the patient. Here we are obliged to use every means of ascertaining its effect, and as we know from experience that some preparations of this femimetal are more readily determined to the skin, and others to the bowels, the selecting

lecting of these becomes a matter of the most serious consequence to him who has a lively sense of the importance of his charge: and I am convinced I have met with cases, that would have puzzled the most confident theorist to conquer this tendency in some of its preparations to operate in a way which at that time I did not desire.

In these disorders frequently the case was not quite so bad when the physician came even on the fifth or sixth day, the pulse remaining full though not hard, the spittle which from the first had been frequently mixed with blood appeared somewhat purulent, it was still however brought up with great difficulty, the pain in the breast and the laborious breathing continued, and there was likewise a propensity to sweat. From these appearances an encouragement of the sweat, by warm drinks and greater quantities of bed-cloaths, was recommended to many, together with balsamic emollients for the cough,

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and stupes or blisters for the pain in the breast. This practice seemed agreeable to the best systematic authors, but alas it was not agreeable to nature, nor attended with success; the patient usually becoming delirious, expectoration and breathing more and more difficult, and a malignant fever succeeding the inflammatory one. Wherever then the disorder had been very violent at first in a plethoric patient, if the pulse was not sunk to great weakness, and the pain and difficulty of breathing continued, although it might be the fifth or sixth day and expectoration begun, yet drawing a large quantity of blood seldom failed to give immediate relief. Drawing a small quantity indeed I have mostly found detrimental, expectoration stopping without any equivalent good symptoms. Bleeding for the relief of inflammations in the breast is as old as the first writings on physic, yet it has at different times been clogged with so many cautions as to render practitioners afraid of acting with
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that boldness which a violent disorder often requires. The restraining it to the compass of the first three days has been universally of late exploded, but the forbidding it after a streaked or purulent spitting begins, has been more generally adopted than it ought. Wherever the disorder has not been very violent at first, and on the spit digesting the pains in the breast and difficulty of breathing abate considerably, in that case any evacuations would be improper, as the expectoration with the assistance of a sweat will mostly prove a remedy. However when the disorder shews great signs of violence in the beginning, then expectoration is by no means to be depended upon : if it is, Why do the best practitioners always take the affair out of the hands of nature by letting of blood and other means ? Can it then be more depended upon the fifth or sixth day when by the laborious breathing pain and fever remaining it has evidently shewn its insufficiency ? No ! but it may be advanced

that bleeding has been found to do harm at this period, and that spitting, though at the best a precarious remedy, ill suited to the violence of the disorder, and for the promoting of which we can do very little, is yet better than none. Were the assertion concerning bleeding always true, the argument would be conclusive. But it must be remarked, that few have been induced to try a very copious drawing of blood at this time. The hardness of the pulse being diminished, and the patient weakened by the continuance of fever, seems to require a sparing hand. When the lancet however is thus timorously used, nature is prevented in the efforts she is making, which though small have still a possibility of success, and at the same time nothing proportioned to the magnitude of the disorder is substituted in their stead. At this time the inflammation seems in an uncertain state between suppuration and mortification, nature endeavouring to procure relief by the former, whilst the violent

lent tide of the disease runs fast toward the latter. In these circumstances small as well as copious bleedings equally prevent suppuration, but the latter also drive away the danger of mortification. Similar to this Botallus observes in the plague, and Sydenham in the pestilential fever, that cautious bleedings did harm, while copious ones proved eminently serviceable. This observation may I believe be extended to a variety of remedies and disorders; as I think I have always seen that, although where we wish to second the struggles of nature gentle methods are most proper, yet when from a conviction of their impropriety or insufficiency we are led to counteract them, then are we to make use of powerful ones. By this means nature deserting her former intention is forced to co-operate with ours, whereas if a more timorous method is pursued the symptoms become anomalous, and all is perplexity and distraction.

In these complaints when the pain in the side has remained considerable, though

by large and repeated bleeding and other evacuations, the fever has been subdued, blisters were used with great success; and I have likewise known common resin given as pills to the quantity of a drachm or more produce excellent effects much superior to gum ammoniac or any similar substance.

At the time that these inflammatory diseases reigned among persons of a maturer age, one of the same kind attacked infants, often bringing speedy and certain destruction upon them. This appeared to me an inflammation of the lungs, both from the symptoms and successful method of cure. Children of a full gross habit were most liable to the complaint, which had been at former times much more epidemic than it was even during this constitution. The chief symptom in it was a wheezing and extreme difficulty of breathing, from whence it received the name of a stuffing. Along with these there was a
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short dry cough, high fever, and a swelling and redness of the face, which increased almost to blackness. It proved fatal to some in four or five hours, and rarely lasted much beyond a day. The most effectual remedy in this complaint was plentiful bleeding, without which all others were vain, and if the first did not sufficiently check its progress, a repetition became necessary, no fears of succeeding weakness operating so powerfully as the great and immediate danger. As soon as the first bleeding was over a blister applied somewhere on the chest frequently had a happy effect; and if the disorder continued any length of time, antimonial vomits became highly useful.

Before the summer solstice the measles sprung up with a most luxuriant growth. Nothing so worthy of notice occurred in them as the violence of the fever and the greater than ordinary disposition that they shewed to fall upon the lungs. The

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cough was often very dry and troublesome, the head much oppressed and heavy, the eyes watered, and were remarkably pained on the admission of light; there was frequently violent head ach, and sometimes slight delirium on awaking from sleep. Bleeding was used in the beginning with the greatest success, and it was frequently necessary to repeat it after the efflorescence had scaled off. Indeed wherever it had been entirely omitted or sparingly used at first, the danger of the last stage became greater. A cool regimen and gentle purges were likewise requisite; as where a hot regimen was insisted upon even adults were seemingly brought into danger, though I knew of none but young children to whom they proved fatal. Many of these died about the beginning of the second week with a violent fever and stuffing in their lungs not to be relieved by bleeding, blisters, or vomits, though undoubtedly the most efficacious remedies in these circumstances; the warm bath in a few

few instances gave the greatest relief, where the others failed. Frequent laxatives were also necessary after them ; and I have always observed, that the more any disorder partook of the inflammatory nature, the greater the necessity for purging after it was over, whereas truly putrid diseases seldom require it.

In the springs of these dry years, and also in that of 1772, I met with more instances of the erysipelas than in all the remainder of my practice. In the beginning, the anxiety, thirst, and heat of skin were mostly very great, the pulse was quick and hard, and blood highly inflamed, the coma or delirium were most remarkable when the disorder attacked the face, much bilious matter was frequently thrown off by vomit or stool, and along with the eruption there was an inclination to sweat. The pain in the affected parts was sometimes excruciating, and neither it nor the fever often abated considerably
for

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for two or three days after the part swelled and inflamed, nay I have seen instances where the fever continued violent after the part affected has subsided, and was only conquered by constant purging. The disorder in some cases occupied a very large surface of the body, as the thighs and whole back, or most part of the chest and abdomen. There were often no vesiculæ to be seen, but the skin was red, swelled, and rough, changing by degrees to yellow as it scaled off, and a great itchiness sometimes attended it. The disorder in this country is very apt to return every year, and attacks the hands more frequently than any other part, these remaining stiff and much swelled during life. Bilious and scrophulous constitutions were those I always found most liable to it, the former indeed so remarkably, that I am inclined to think the Galenists deducing this complaint from a bilious cause, taken from accurate observation rather than theory. I have not once known it either suppurate or prove fatal.

The method which I have seen mitigate it soonest was the drawing blood at first, and afterwards keeping up a constant purging for some time by rhubarb or the neutral salts ; and it never fell inward upon the vital organs from this treatment. Where few symptoms of any bilious matter appeared, and the disorder not violent, after bleeding, if deemed necessary, a gentle sweat was encouraged, which also served to give relief : but when treated in this manner it required purgatives afterwards, and returns of it were much more frequent. Yet in one case where a most profuse sweat was enforced for thirty hours, an interval of treble the usual time succeeded before the next attack. As to the prevention of it, the cold bath especially in moss-water proved sometimes very effectual ; sea-water held the next place. Those who have returns of it at a stated time of the year, especially the spring, find benefit from drawing of blood and taking nitre or laxatives before that period ; goats whey

whew is likewise useful during the summer.

A connection between the epidemic fever prevalent at any time, and the other diseases accompanying it was manifest every season that I had an opportunity of seeing them. If we look back we shall find that inflammatory and eruptive disorders have been almost the only ones mentioned since 1764. The epidemic fever during that period partook the nature of both. In the beginning the skin was hot and dry, tongue parched, thirst great, pulse quick and strong, head-ach violent, eyes inflamed, urine high coloured, and body costive. In this state plentiful bleeding often relieved the patient from all complaints, few instances occurring wherein the skin did not become moist soon after a sufficient quantity of blood had been drawn. This disposition to sweat was to be promoted by warm diluting drinks, and a greater quantity of bed-cloaths. Sometimes however
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it happened that even after a copious discharge of blood, the skin still refused its moisture; to such persons the farther use of coolers became necessary, laxatives therefore or repeated clysters with nitrous and acid medicines produced excellent effects. Always however a moisture on the skin preceded amendment, but it was sometimes so gentle as to be rather a sign of returning health than the means by which it was brought back. There was no time of the fever, whilst the pulse retained its strength and fullness, in which this method did not put a speedy termination to the disorder; but when the letting of blood had been too long delayed, and a warm regimen insisted upon, then the pulse became unequal, and the fever remittent. The danger attending this state was ever in proportion to the heating things which had been used, as where the warm method was insisted on to the highest, a phrenitis was the speedily fatal consequence, but in those who were more favourably dealt with, especially

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pecially such as were past the time of youth, a copious eruption of miliary pustules breaking out about the fourteenth day put an end to the disease. Both the red and white species of this eruption were common, and equally ended in recovery, the former however were most frequent. Along with them a gentle moisture of the skin appeared, and they were always preceded by a sharper paroxysm than ordinary. This last was so great in some as to alarm those who did not sufficiently understand the nature of the distemper, and resembled the crisis described by the ancients as much as any thing which I have seen in practice. Indeed the disorders of this epidemic constitution always ended by a manifest crisis, and corresponded nearly as to symptoms and method of treatment with those described by the Greek and Arabian writers. When the fever ran high in this disease, although a very warm regimen had not been used, miliary eruptions were not to be seen nor expected, but

but about the seventh or eighth day, a great number of small, florid red spots appeared on the skin. These never afforded any relief, on the contrary the fever and delirium increased until about the fourteenth day, when a sharp paroxysm followed by a copious sweat restored the patient beyond what could be hoped. Both this, and the former species of the fever with miliary eruptions, were liable to apparent inflammations of particular parts, chiefly the breast and lungs. When these came on in the beginning of the disorder, bleeding proved serviceable, but often they did not attack until a short time before the close or even during the last paroxysm. In this case bleeding was pernicious, and the matter might mostly be left to nature, as in proportion to their severity the wished for crisis was accelerated. Where however it seemed necessary to do something; blisters had an excellent effect. Sudorifics likewise were serviceable, a sweat never failing to give immediate relief; and

and it must be remarked, that though a moderately cool regimen was most proper in the beginning of this disease, yet about the time of a change, warm cordial medicines were absolutely necessary, the skin being the outlet by which at this time it chose to go off. I remember a fat plethoric gentleman on the thirteenth night, seized with a violent pain in his side, great anxiety and difficulty of breathing; the fever likewise rose considerably. Under these circumstances the friends insisted upon his being bled, which the physician would not allow. Luckily during the debate he found himself relieved on expectorating a few bloody spits, and getting some warm drinks he fell into a gentle sweat. In the morning he had not any fever remaining, and on examining his skin it appeared covered with a white miliary eruption, which the physician had suspected from his complaining of an itchiness and prickling over him during the night.

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When this disorder attacked in the autumn, especially during the first year of this constitution, it assumed much of a bilious appearance still preserving however its peculiar inflammatory genius. In such instances after plentiful bleeding, which the height of the feverish symptoms always pointed out, the whole affair was to be committed to antimonials. These evacuated the vitiated bile either up or down and afterwards procured a sweat; thus answering every possible indication of cure which in so complicated a disease was with difficulty performed by other medicines. Though these are the common methods in which antimonials affect the body, yet I have seen more than one case wherein they produced no sensible evacuation, but threw the patient into a profound sleep for many hours, from whence he awoke almost without fever or complaint.

It is true I have always been doubtful as to the exhibition of antimonials in simple inflammatory fevers, where

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tiated in the ftomach and bowels; not but
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good effects in fuch cafes; yet the altera-
tion brought about by them was moftly
uncertain, the fmalleft accident not per-
haps to be prevented, or even time where
nothing extraordinary happened frequent-
ly bringing on a relapfe which never fail-
ed to prove fatal. A melancholy instance
of both thefe obfervations I faw in a
gentleman with an inflammatory fever,
violent delirium and vigilæ. On the fifth
day after other methods had been tried
in vain, and the diftemper had a moft
threatening afpect, a dofe of James's pow-
der was given, which in a fhort time
threw him into a fleep of twenty-four
hours duration. On awaking, his fenfes
were returned, fever gone, and his pulfe
which had been exceedingly quick and
hard was foft and did not exceed feventy-
five pulfations in a minute. In this way he
continued upwards of two days, and be-
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gan even to have a desire for food, when unfortunately being left with but one single attendant, he asked for and obtained a glass of wine contrary to express directions from his physician. He had not taken it above three minutes when the fever and delirium returned, and he died in a few hours in the utmost distraction. This soporific effect is not confined to James's powders; other antimonials as tartar emetic and antimonial wine even in small doses possess it powerfully. It must be noted however that all the cases wherein I have seen it happen, were such as had been obstinately watchful previous to its being given. Blisters likewise often produce the same effect in similar cases.

This is the second instance recorded in these Observations of an obedience to the anxious cravings of the stomach proving very hurtful to the patient, and more will occur in the last constitution. I am very sensible that the stomach in feverish disorders seldom demands any thing that is

not highly beneficial, although the propriety of it may not be apparent to the physician; and even where it craves things that seem to him hurtful, I think it will be in the right nine times out of ten in contradiction to his judgment: I therefore am generally guided by its feelings, nay am greatly rejoiced when at the height in a fever the patient is seized with a longing for any particular food or drink, I always indulge them in it, and find fifty recover under such circumstances for one who dies. But as it has been observed that sometimes a sinister event followed an indulgence in those things which the stomach desired most anxiously, it would be of no small consequence to the practice could we fix upon a criterion whereby we might judge with tolerable certainty when we ought to refuse our assent to its dictates. From my own experience I am led to conclude, that whenever these longings arise before the disorder begins to decline, they should never be resisted; but when a change for the better has taken place, especially if the
pulse

pulse comes nigh the natural standard, I ever refuse to be governed by them, unless from the extraordinary violence of the cravings I apprehend some bad consequence, or that the patient seems to lose ground. Indeed after an abatement of a feverish complaint, I am more fearful of any great alteration in the non-naturals than before. During the violence of the disease a degree of insensibility prevails which prevents the sufferer from being readily affected by external accidents, I therefore allow their linen to be shifted frequently, their bodies exposed to cold air, &c. most changes in the disorder that can happen then being for the better; whereas after a favourable alteration, I have seen very slight causes produce a relapse or other untoward effects. No prudent person would wish to run any risk at this time; I therefore do not permit their being shifted nor taking large quantities of food, and in every thing am guided by my own opinion, not their inclinations.

CHAP. III.

CONSTITUTION SECOND.

THE month of August 1767 was tolerable throughout, after which a cold variable rainy season began, the wind blowing almost without interruption from the south and west, until a few days before Christmas, when a frost commenced with a north-easterly wind. This continued until the 12th of January 1768, from whence for three months there were frequent frosts, sometimes of eight and ten days continuance, interchanged with rain, the wind blowing from all quarters, except

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except during the last ten days, when it settled in the east with frost. During the whole summer and autumn the winds and weather were variable, inclining however to wet. About the second week in November the rains abated, and until the end of the year there were frequent gentle frosts, the wind still often changing.

The disorders of the last constitution had now an end, or at least were seen so rarely as scarcely to deserve the name of epidemic, and in their stead rheumatic complaints were almost the only ones to be met with. The chronic rheumatism is endemic in this country, few persons missing some touches of it either in the beginning of winter or spring: but during this season it might likewise be called epidemic. A person after being exposed to cold air, especially if attended with rain, found himself heavy for a day or two, his stomach was sometimes out of order, squeamish, and he complained of drow-

fineness and chilliness attended often with a dull pain in his head and drowsiness. These complaints receded gradually, giving place to pains in his shoulders, loins, or whatever part of his body had been formerly liable to the disorder. They were frequently very acute without altering the pulse considerably. When not very violent, they more readily changed from one part of the body to another, and were apter to attack the head. There was oft a sensation of great coldness, as if a freezing wind blew, or water was poured on the part. After remaining for a length of time they not unfrequently degenerated into a disorder resembling a paralysis. They were often remarkably obstinate, resisting for months the force of the most applauded remedies. A continued use of antimonials in small doses was serviceable; and of them James's powders were not least eminent in number of cures, their greater disposition to go off by sweat agreeing well with the nature of this disorder. Volatile tincture of guaiacum

cum and other medicines which promote the cuticular discharge were used successfully, especially when combined with antimonials; thus I have found equal parts of volatile tincture of guaiacum and antimonial wine given to the quantity of a tea spoonful, or what the stomach would bear, every night, as efficacious as any medicine in the apothecary's shop. Balsam of copaiba has been taken by some with advantage, and also turpentine or its oil. It was besides necessary for all those who wished either to get rid of this irksome distemper when present, or to avoid its future attacks, to wear flannel next their skin during all the colder months of the year. Nor would I advise any one to rub off that oiliness which always gathers under it, as I have observed that in proportion as the skin was kept free from this, the more sensible it was of the changes of the weather. A flannel shirt therefore, contrary to the directions of some, ought to be worn by night as well
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as day, nor should it be too often changed. Though these methods mostly succeeded in removing this troublesome complaint, yet the alteration was so slow and imperceptible, that many patients had not sufficient constancy to persevere in using them, and in some instances they likewise plainly failed. In such cases, and indeed in most others of the chronic rheumatism, I found sweating the part affected or the whole body useful, by means of the vapour of warm water, or a hot stove. This when complied with for a sufficient length of time, proved a much more expeditious as well as certain cure. Even the common people here practice this method with great success. They place a man on a low stool, in a vessel containing a quantity of boiling water, in which certain herbs of their collecting have been put; the heat is confined round his body by means of a sheet fastened about his neck, which hangs down over the brim of the vessel. In this way they keep a patient for several
several

several hours, and when faintness obliges him to be taken out, he is wrapt up in flannels to prolong the sweat. By one or two repetitions of this practice, an enemy has oft been beaten out, which had long withstood the regular forces of physic.

Before I finish the subject I must take notice that I have found calomel and other mercurials sometimes of service in this complaint. The first case in which I ordered them was that of a young woman twenty years of age, who was tormented with a rheumatism of more than two years standing, the pains were very violent, chiefly in her knees, and had weakened her so much as to give reasonable apprehension of a paralysis, her appetite was gone, and her pulse quick and weak. After trying many things in vain, on a more minute enquiry I found that a short time before the pains began, she had been taking mercurials for an eruption on her skin, and that she probably caught cold during their use. From this opinion I was induced

duced to prescribe another course of mercury, which I knew to be the best remedy for any complaints arising from mismanagement during a former course of that medicine, and had the inexpressible pleasure to find that not only the pains immediately gave way to it, but her menstruation likewise returned, which had been obstructed for some months, and in a short time she was restored to perfect health. In other cases from the like cause I have found them equally serviceable, as also wherever the pulse was weak and the patient languid and phlegmatic.

So much for the chronic rheumatism a constant inhabitant of this country, besides which during this constitution the acute rheumatism likewise paid us an unwelcome visit. In it the feverishness and pain were very intense, the blood when drawn highly inflamed, and the head affected with an uncommon stupor, yet the patient could seldom sleep. After the first days of the disorder there was a great propensity

penfity to fweat, what was brought out by nature however afforded fcarcely any relief. The fever and pains now plainly remitted or almoft might be faid to intermit : attacking with the greateft violence, but without any fhivering, in the evening and continuing until toward morning, when they abated with a fweat, to return the fucceeding night with undiminished vigour. The urine at this time depofited for the moft part a copious white mucous fediment, in fome cafes however it was reddifh, but this did not forerun any manner of change. Thus has this diforder been known to continue for months until the unhappy patient was wafted to the laft degree.

When they employed a phyfician in the beginning, he always found plentiful bleeding neceffary. Nor was there the leaft chance of this being omitted, the hardnefs and frequency of the pulse, and height of the other fymptoms of fever, fufficiently pointing it out to the moft unskilful

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skilful practitioner. A dose of gentle cooling physic was then proper, as costiveness always prevailed in the beginning. If by these means the pulse was not sufficiently lowered, which seldom happened unless heating things had been too speedily used at first, a repetition of them became necessary; but if it was, then immediate recourse might be had to sudorifics, among which antimony held deservedly the first place, producing its effect with most certainty and heating the system least.

The sweating method however often failed, or before it became advantageous, reduced the patient to such an extreme degree of weakness, as rendered the practice not very eligible. In these cases, or wherever regular remissions appeared in the disorder, nothing was so serviceable as the Peruvian bark. At first I was diffident to a fault in using it, having always thought sweating the true method of curing this disease, which I knew the bark would effectually prevent; but meeting with cases wherein
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wherein antimonials and every other medicine that I could think of failed, and where the weakness of the patient became a capital consideration, I was induced to venture upon it as a strengthener, when beyond my sanguine hopes, it likewise put a speedy period to all the other complaints. Encouraged by this success I prescribed it in the disease wherever the pulse had lost its hardness, especially if there were evident remissions in the fever; and had not in one instance reason to repent my having ordered it.

I must here remark that in this disorder, as well as most other feverish ones wherein I have seen the bark successfully tried, it has appeared at first to produce an unfavourable effect, all the symptoms being increased. Thus here the pains were augmented for a night or two: in the hectic fever the sweats instead of being checked were increased for a short time; and in remittent fevers the succeeding paroxysm has been rendered so violent as to alarm those
who

who were unacquainted with its operation. This effect of the bark is very necessary to be attended to by all physicians, as I have known many instances wherein on this account the use of it has been too suddenly omitted, or if luckily a sufficient quantity had been given the consequent recovery was attributed to some paultry remedy, totally unequal to the task, whilst the bark has gained nothing but discredit where it deserved the highest commendation. I have tried this medicine in the chronic rheumatism ; and wherever the viscera were weak, or there was any scrophulous habit, mostly found it succeed, but cannot say that my experience in this has been so great as to entitle me to recommend it in all species of the distemper.

During both the autumns, and beginning of the winters of this constitution coughs from exposure to cold were very frequent. The treatment of this complaint as laid down by most writers did not answer

fewer either at this or any other time. Bleeding was scarcely ever serviceable, except in the few instances attended with great pain in the breast and hardness of the pulse. In other cases when much blood was taken away, the feverishness went off, the spit never digested, and the cough continued phlegmy and obstinate, often terminating in a consumption. What I call a digestion of the spit is its becoming somewhat purulent, sweet, and being brought up with ease, in which case the complaint soon abates. To bring the cough speedily to this should be our chief intention, which I will venture to say has been ten times prevented by bleeding in this climate, for once that it has been promoted: nay I will go farther and say that bleeding has been recommended in those cases to obviate consequences which are almost never found to follow, that is fever or inflammation of the pleura or lungs. Have there been many instances seen of any common fever beginning with a cough

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or a pleurisy or peripneumony without an acute pain in the breast? true it is that the cough by being suffered to continue for weeks or months will occasion a hectic fever and inflammation, but these are not the consequence of the first fever that having mostly ceased long before they begin. Our first indication therefore in this disorder should be directed to the cough and spit, not to the fever. The patient should therefore be confined to his bed, and sweating encouraged by warm weak drinks; this I have never known fail to remove the complaint entirely when complied with at first and long enough. I know a lady of a consumptive family who makes it a rule to continue in bed until she finds herself completely rid of the cough, and is sometimes obliged to lie for three days, from which she feels no bad consequences; those however who have no predisposition to the disorder need not be so exact. This management, with a diet of light stews and abstinence from flesh meats, proves

proves successful at first; but when the fever which attends the beginning of this complaint has abated, then the method must be somewhat changed and strong sudorifics used, among which I esteem highly a quantity of warm punch or wine drank on going to bed, having often seen excellent effects from it. Vomits become now serviceable and other medicines which shall be mentioned when speaking of phthisis; let me here however point out a mistake that I have seen committed by even eminent physicians. At this time the spit is phlegmy and brought up with difficulty, the pulse weak and the lungs much stuffed, in such a case persisting in that diet of slops which had been used with great propriety for weeks before, is highly improper. I have ever found the diet at this period injurious in proportion to the quantity of liquid contained in it, and therefore always order a change to shell fish, or light flesh, with a proper proportion of wine, nay I have known an excess in this

last or spirituous liquors totally remove the disorder.

At the same time that the acute rheumatism prevailed, a fever shewed itself scarcely to be distinguished from it in the beginning, but by the remissness of the pains, and their affecting the body more generally than in the other. The patient for two or three days was languid, chilly, and without appetite, finding himself as if all his body had been bruised. He then complained of pains through his bones, and was obliged to confine himself in bed. His skin began to grow warm, and his pulse which had been hitherto rather low became strong and quick, a very slight head-ach which he complained of at first turned into a stupor that commonly lasted until the change, this was always very remarkable, and seemed the distinguishing symptom of the disease. His tongue was dry, body costive and urine high coloured, yet his thirst was not intense. There
were

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were some but not very considerable remissions attending this disorder. It was by no means mortal, usually ending by a sweat from the fourteenth to the seventeenth day, the urine giving a favourable sign by depositing a copious light reddish cloud, which in a day or two on a complete change became high coloured sediment.

This fever being attended with little danger, few and gentler methods were tried with it than any of the others. If the pulse on rising became hard, some blood was drawn, which always shewed a little siziness; gentle laxatives or glysters were also requisite from time to time: besides this, nothing else seemed requisite but giving the patient plenty of drink, and about the crisis adding some wine or other cordial to it. Blisters likewise at the period had not a bad effect, though as much cannot be said for them when tried earlier to abate the stupor.

The quinsy which is rather an autumnal than a spring disorder in this country, prevailed much about the first setting in of the winter colds during both the years of this constitution. It was seldom fatal, though often very alarming; attacking women more frequently than men, and seeming to have its seat chiefly in the glands about the throat. When it once suppurated, which was a very unfrequent termination especially in the autumn, the person became liable to attacks every year afterwards. During all my practice here I have not seen one instance of the malignant ulcerous sore throat as described by authors: towards the end of consumptions indeed the throat is sometimes covered with foul black ulcers; this however though not so speedily fatal as the other, is beyond conception intractable. There appeared some cause during these years for supposing the quinsy infectious, at other times it is evidently not so.

A pain

A pain in deglutition was usually the first symptom perceived, the glands of the throat seemed swelled and hard externally; on looking into the mouth the velum pendulum and uvula appeared large and inflamed, the root of the tongue swelled and covered with much white viscid mucus. The pulse was not very quick nor hard, neither was the blood when drawn very fizy. No great thirst nor heat of skin attended it. In the progress of the disorder the swelling both internally and externally became much greater, and deglutition very painful often almost impossible, yet there was a constant inclination to swallow which was performed almost convulsively, nay the patient sometimes seemed from it in danger of universal convulsions. He could not now open his mouth wider than for the admission of the flat side of a knife, yet during this whole time, neither was the breathing affected, nor the fever remarkably high, to which I attribute its not proving mortal. The patient could not sleep,

being always roused when just beginning to dose, by a violent convulsive start and pain in his throat arising from his having attempted to swallow. A pain often also passed from the throat to the ear. About the fifth or sixth day a spitting which had begun somewhat earlier, came to a great height, so that they were obliged to keep their head inclined forward to let a large quantity of clear water run out of their mouth: as it went on, the pain, swelling, and all the symptoms depending on them gradually abated. This spitting seemed the natural discharge of the disorder, and I have not seen many instances of its going away without it.

In the beginning of the disease bleeding was serviceable, yet the benefit received from it was in no proportion to its effects in other inflammatory disorders. Neither the appearance of the blood nor hardness of the pulse encouraged any one to a repetition of it. Gentle purgatives given every day produced a good effect ;
strong

strong ones had a great inconvenience, as they brought thirst upon a person unable to allay it by drinking. These evacuations though they served to mitigate the disorder, yet did little as to shortening its duration; that, I found reserved for blisters alone. The first one which was applied seldom procured much relief, but a second never failed to produce great and immediate good consequences; nor was it at all material whether they were applied to the part affected or in its neighbourhood. One of the first cases which I saw of the disease led me into a mistake in this matter which succeeding ones only rectified. Having been induced to blister a person labouring under the quinsy between the shoulders in preference to any other part, from which I perceived little advantage, yet thinking the indication for blistering still continued, I ordered one to be applied over the part affected, and found that the disorder immediately gave way to it. From hence I imagined that
this

this might be the only proper place for blistering, but in the next patient a blister on the neck seemed as ineffectual as the first one in the former case, whilst a second between the shoulders performed the cure; and on many trials I found that little benefit was to be expected except from a repetition of it, or keeping up a large discharge for a length of time from the blistered part by means of epispastic ointment. The latter proved sometimes very inconvenient, as it is difficult to keep cantharides long applied to a large part of the skin without raising strangury; they besides always leave a deep mark or scar behind them, which to ladies is a disagreeable circumstance and may be avoided by the other method.

Volatiles used externally to the throat were not improper, yet I must remark that the country people here find more benefit from the application of those putrid animal substances which contain them; such poultices offend not their delicacy.

As

As to gargles I cannot say that I have ever seen great advantage from their use after the disorder has been confirmed. In cases where the breathing was affected I have known the warm steam of vinegar and water drawn in with the breath, act like a charm, giving immediate relief from this most alarming symptom, and rendering the person able to speak, who perhaps for some time before could not utter a word.

When this disorder came to suppuration it often threatened the life of the patient before it broke. In these cases if an opening could be made in the tumor it was done instantly; but the mouth and teeth were mostly so closed that no instrument could be got in. One of the worst of these, wherein I almost wished for a surgeon to perform bronchotomy, was saved by the persons forcing down a solution of ten grains of white vitriol, the tumor breaking and discharging a large quantity of purulent matter on the first violent straining to vomit. Those who are liable
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to frequent returns of this disorder find great benefit from keeping alum in their mouth, and swallowing the saliva impregnated by it whenever they are threatened with an attack.

The chincough was a disorder of this constitution, beginning to appear in harvest 1767, and becoming very frequent during the succeeding winter. It chiefly attacked children, sometimes however seizing upon those grown persons who had not formerly undergone it, few or none being liable to it a second time. The name of infectious belongs perhaps as much to this disorder as many of those to which it is applied, for there are few commonly spared in a family when it once gets an entrance. A fever always accompanied it in the beginning, which was of the remittent kind, but in a few days this went off. The violent convulsiveness of each fit of coughing scarcely ceased until the patient became black in the face and

and was almost strangled, yet in younger subjects nothing but a little pituita was brought up, in the elder indeed a greater quantity appeared, but in return they were not so liable to vomit. This and the hooping noise attending it, together with the want of pain in the breast or hectic fever, and a frequent vomiting of tough phlegm form the distinguishing symptoms of the disease. It often proved very obstinate, but seldom fatal unless a marasmus was brought on by the greatest neglect.

Bleeding was extremely beneficial during the first stage, and the blood when drawn shewed much siness. Constant gentle purgatives were also serviceable. Although these seldom failed in the end of banishing the complaint, yet they produced their effect too slowly to be used often when more speedy and equally certain methods were known. The remedies which I have known to produce their good consequences sooner were emetics. A gentle one given every second or even every

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very day where the person's strength would bear it, brought about a sudden alteration for the better, the cough began soon to abate, the lost appetite to be restored, and all spontaneous vomitings to cease. It was absolutely necessary that the fever should be mitigated by bleeding previous to their exhibition, if the disorder was only in the first stage. Among the emetics hippocacoanha proved more serviceable than squills, they were however frequently united with good effect. Antimonial vomits seemed to have superior qualities to these, but sometimes operating too roughly, they were seldom taken unless the gentler methods failed. After the disorder had given way to the continued use of these or other medicines, Peruvian bark, the cold bath, and strengtheners became requisite, together with frequent exercise, especially on horseback. This last indeed was needful as soon as the first fever went off. I cannot say that I have seen opiates, or the nervous medicines commonly called antispasmodic, of much service in this disease.

During this constitution I often met with a disorder, that is to be seen also at other times, and which I shall beg leave to call a hysteric inflammation. It attacked females only, and the face more frequently than any other part of the body; it has however occurred to me in almost every different part. The causes which produced it were various, sometimes taking cold, or a sudden obstruction of menstruation, but at others there appeared little sensible origin for it. The part seized became painful, hot, swelled, hard and inflamed, yet the person had not so great a degree of fever as to be confined to bed. Although the tumour was circumscribed, and the pain often violent so as to threaten suppuration, it never terminated in that way. The time of its duration was very uncertain, as it sometimes went off in three or four days, and at others lasted for a fortnight. Its end however was the most remarkable circumstance

stance of all, for on the menses returning when their stoppage had been the cause, or frequently with as little reason as it seemed to begin, it would disappear in the space of a few minutes or at most in an hour or two. Several methods were followed in the treatment of this complaint, to little purpose for the most part, except where it arose from obstruction, in which case a dose or two of *tinctura sacra* or some other purgative emenagogue performed the work. When the pulse was very high bleeding and cooling physic were not prejudicial. External applications of whatever kind seemed to render it more obstinate. Blisters applied to some neighbouring part were the only things which universally appeared to have a good effect; especially when a discharge was preserved from the part for a considerable length of time. That this disorder had attacked the internal parts was not improbable in some instances, and it is submitted to the judgment of the reader whether

ther the following very extraordinary case was not one of this kind.

A young lady about twenty years of age, of a sanguineous habit, being much heated with dancing took a large draught of cold water, and afterwards exposed herself to the open air in a frosty night. On returning into the room she was seized with a sense of pain in her stomach, attended by a shivering, upon this she immediately took some warm cordials and was put to bed. Next morning, and for five or six succeeding days, she did not find the pain in her stomach very violent, but whatever food she took was thrown up undigested in three or four hours afterwards. Her menses which should have happened about this time did not appear, a fever began to rise, and the pain to be more intense. Being called to see her, I prescribed venæsection, and as she was constive a gentle dose of physic. Her blood shewed no sign of inflammation, and though the purgative was thrown up it

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operated three or four times. From these she found no relief. Warm fomentations were applied to the part, and afterwards an anodyne plaster; saline mixtures, anodynes and opiates were likewise tried inwardly, but without effect. The time which food lay upon her stomach from the very first became gradually shorter, so that she did not about the end of the second week retain it fully an hour. After this I was prevented from seeing her for some days, during which time she received repeated clysters, and the part was cupped without advantage; on my return I found all her complaints much worse; her drink, for food she could not bear, was thrown up as soon as swallowed with most exquisite pain, her thirst was great, skin hot, pulse quick but low, she was confined to her bed and somewhat delirious. She had been now ill above a fortnight, and the symptoms increased with amazing rapidity, the drink in a short time not getting beyond the cardia until it was convulsively thrown back. This
strong

stoppage in the œsophagus ascending by swift degrees in a very few hours nothing could be forced over the glottis, her head becoming every minute more and more affected. At this time a large blister was applied over the whole region of the stomach. After it had been upon the part about four hours, her pulse rose, her head likewise became more composed and in a short time she swallowed a large quantity of drink without the least difficulty or pain. She now took some weak food having digested nothing for many days. When the blister had remained upon the part about ten hours, she complained of so much pain from it, and seemed so well in her stomach and deglutition, that it was thought expedient to have it removed: but to our great sorrow and astonishment it had not been taken off three minutes until the excruciating pain in her stomach and impossibility of swallowing returned. I therefore caused it to be applied again immediately, only taking care

that the flies did not touch any part where the skin was stripped off. She was relieved by this in two hours, and as I perceived how readily her complaint returned, the blister was suffered to remain upon the part a great length of time, and the fore afterwards dressed with epispastic ointment for a fortnight ; by these means, she soon recovered health and strength, though her menses did not appear for two or three months, and has remained well ever since, only that the *clavus hystericus*, and some other complaints of that kind, to which she had been formerly liable, have returned more frequently and with greater violence.

CHAP. IV.

CONSTITUTION THIRD.

THE spring of the year 1769 until the vernal æquinox was wet with but little frost, wind variable. After which for two months the weather became remarkably fine, wind most frequently in the east. The latter end of May and all June were cold and rainy, wind westerly. July was a tolerable month but succeeded by a wet August and September, the wind continuing in the same quarter. In October and November the wind often changing to the east produced delightful weather; this however was contrasted by De-

cember being one continued storm of wind and rain from the south and west. In the beginning of January 1770 there were a few days of hard frost, wind north-west; afterwards the weather variable, inclining however to good, wind at west. On the sixteenth of March a frost began attended by snow which lasted with only four days intermission near a month, wind during the first twelve days easterly afterwards in the west and north. The remainder of April, and until the end of June the weather was rainy and so cold, that on the twenty-ninth of May it froze sharply, yet there was not any other day of frost during that period, wind mostly in the east. A fine season ushered in July, but after the first ten days the remainder of the month was wet and bad, wind blowing from the south and west. August was good, wind for one half of it in the east. The rest of the year a continued windy rainy season prevailed, except fourteen days of frost which were scattered through it, wind westerly.

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The disorders of the last and present constitution were blended together about the close of the one and beginning of the other. That is, dysenteries, which were truly the epidemic disease of this year, began to shew themselves in the end of harvest 1768, and were common during the succeeding winter; whilst rheumatic complaints were very frequently to be met with in the spring of 1769. This mixture of epidemics, when it happens, must always prove the source of much trouble anxiety and even perhaps mistake to the physician, as in the present instance I must acknowledge happened to myself. Having hitherto found that the general treatment of an epidemic was always the same, or scarcely to be varied by those smaller different appearances which happen on account of age sex or constitution, and unluckily meeting with several dysenteric cases attended with great fever and tormina, whilst the rheumatism yet held

unbounded sway, I was led to suppose that the rheumatic matter or cause, whatever that was, had attacked the bowels. Fortunately for the lives of several who were first seized, the treatment of the two disorders in some instances agreed, and it soon became evident that the other parts of the practice were highly mischievous, and that a new plan must be sought for. I must here remark that though resolution and steadiness in practice be highly commendable, yet this should chiefly be confined to chronic disorders, where I have often seen a medicine when persisted in perform a cure, of which for the first weeks or even months it gave no hopes. In acute complaints a practitioner should likewise be steady in following a method which he has always known successful in similar cases, though the opinion of the whole world were against him. Nor even in the most dangerous case should he be in the least irresolute or swayed by the fear of his own reputation. Never let that
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man call himself a physician who perceiving a patient's situation to be absolutely desperate if left to itself, and the smallest chance even one against a thousand that by acting boldly he may be saved, shall let so paultry a consideration as the hazard of his own character tie him up from stretching out his hands for their relief; he is a stranger to all the finer feelings of the heart, and to the true enthusiasm of genius, which alone can make him excel in his profession, and go through all its toils and disagreeable circumstances not only without repining but even with delight and exultation. But when a physician finds his practice not attended with success he should ever pause and be wary. In this case his opinions and practice should be ductile as gold, those only being sterling which are refined from all the obstinacy of self-conceit and uncomplying pedantry of theory.

The

The dysentery from being peculiarly endemic here, has acquired the name of the countrydisease; but as during the years 1769 and 1770 I had more frequent opportunities of seeing it, my observations will naturally refer most to that period, I cannot say however that I have taken notice of any considerable difference in its appearance at other times. Two distinct species of it presented themselves, each requiring a very different treatment. An exact attention to this division was the more necessary as to the want of it many fell a sacrifice.

In the first or acute species were seen repeated turns of shivering and flushing of the face, the pulse was quick, gripes and tenesmus great, the stools often mucous or bloody, the stomach was much affected with nausea and often light vomitings. This kind which was often the consequence of sudden cold taken after the person's being overheated required bleeding, frequent vomits of *hippecacoanha*, and a total abstinence

nence from flesh and wine. Astringents and opiates when given early so as to stop the flux, scarcely ever failed to raise a fever with very untoward anomalous symptoms, which did not abate until the evacuation was restored.

The second species of this disorder, which is the most common, was very frequently the consequence of the former when mismanaged: but it was often likewise to be met with where no such thing had preceded, especially among the lower classes of the people, who live on a poor vegetable diet. This was attended with a total loss of appetite, a low, quick, unequal intermitting pulse, the skin was mostly cold, gripes not considerable or in their stead a fixed pain seized one side, the face pale and haggard, tongue covered with a white mucus, thirst only great by intervals, and the stools had a peculiar not highly foetid or putrid smell, but such a one as left no doubt of the disease on a persons first entry who had been conversant

fant with it, nor could this be banished the apartment by the greatest care and cleanliness. When this disorder continued, which it often did, for many months, the food passed almost undigested, the person became much emaciated, and the complaint frequently baffled the utmost efforts of the physician.

As to the treatment of this distemper, ipocacoanha though it seemed to answer best in the other species when given in so large a dose as to prove emetic; yet here on the contrary, small quantities given more frequently produced the best effect. Thus a pill containing three grains was given every night with good success. This never failed to purge next day, and after a few repetitions there remained no manner of lax but what owed its origin to the medicine; it was necessary however to continue its use for some weeks to prevent all danger of a return. The first change for the better on taking this or other medicines was perceived in the tint
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and consistence of the discharge, which from being thin and dark coloured but oftener whitish, not unlike that from a schrophulous sinus, became more consistent and yellow. Whenever this was the case the lax which remained might be pronounced owing to the medicine, and not to the disorder.

Next to this but much superior were antimonials in small doses. I have known cases where the disease had continued for months in a constant course of mismanagement, and where the patient could scarcely stand, having got the facies Hippocratica, that were cured by this medicine alone. The method followed with these, was to give them as much of the antimonial wine every hour as nauseated their stomach on the third or fourth dose. This quantity always proved sufficient to operate by vomiting or purging. This method was repeated every fourth or fifth day, and in the intermediate ones they took as much of the same medicine every night

night or morning at one dose as proved gently laxative.

Astringents bitters and the bark were used in these tedious cases with advantage, but when taken alone they were apt to prove purgative; opium therefore became a most excellent addition to them, as in the pulvis & bolo vel e scordio compositus cum opio, confectio japonica, &c. Opium by its cordial generous powers when given in a sufficient dose shews itself well adapted to this disorder, yet I cannot say that I have seen any very obstinate case cured by it alone. Those who took great quantities of it complained of being very liable to take cold, they were likewise rendered somewhat deaf, and had a troublesome tinkling noise in their ears, that lasted for a considerable time after they omitted the medicine.

There was no disorder in which a more unremitting vigilance was required both in medicine and diet, as the smallest inattention made it necessary to begin the whole

whole work anew. During the use therefore of opium or astringents, it was requisite to interpose gentle laxatives at proper intervals, otherwise after a few days constiveness brought on by the use of medicines, the flux returned with as much violence as before. Hippocacoanha or antimonials in small doses agreed best with this design ; but even these were to be sparingly exhibited, as every thing tending to purge violently, was now carefully to be avoided. Rhubarb in this intention was not improper, but at any other time of this disease it scarcely ever proved serviceable, nor can I think it deserves the encomiums lavished upon it by some, who must certainly have been unacquainted with better remedies.

Claret had a good effect in this distemper, but its dose was often too limited, on account of its inebriating powers, which exerted themselves most readily upon persons in so weak a state ; I therefore mostly substituted Irish cyder in its stead, which is much rougher and more astringent than
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the English, and found it to be superior in virtue to the vinous liquor. Some very obstinate cases where all medicines had been laid aside were cured by this alone. An objection has been sometimes made to me when prescribing it that as apples were thought improper their juice could not be safely used ; but this was a deception, fermentation entirely changing their qualities. Claret and cyder contain astringency blended by the operation of nature itself with their cordial powers, but in the latter astringency predominates, so that a patient can take a very large quantity daily, and surely medicines which may be used as diet have a great advantage over the scanty doses which can be swallowed of apothecaries drugs.

In remedying this disease, especially when it seized any person during the winter season, and indeed all those to which this climate necessarily subjects the inhabitants, great attention was necessary to the promoting perspiration. By this is
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not meant merely the procuring of a sweat, although when the fluids of the skin had for a length of time retained their moisture, that likewise was beneficial, nature seeming to require some extraordinary stimulus to resume her intermitted functions. Thus I have known a debauch with punch or wine when followed by a sweat of eminent service in this distemper, and the country people here use burnt spirits as a cure for it. Whether all the most heating fiery particles fly off in this process leaving only the mildest spirit behind, or that the empyreuma adds a degree of astringency to them I will not determine, this only is certain, that spirits prepared after this manner have a much better effect in the disorder than any mixture of them with water.

But though forcing a sweat was sometimes advantageous, yet promoting an equable perspiration by wearing of flannel next the skin was still more so, and in numberless dysenteric cases performed ef-

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fects little expected on account of the remote indication which required it.

The remark has been already made that this species of dysentery which may be called the chronic one differed entirely from the other as to its treatment, and in nothing was this more conspicuous than in the article of diet. In the other, fops, and those of the lightest kind were the only safe food, whereas in this, although rice or flour boiled with milk sometimes did well, especially where the case seemed to be doubtful to which of the two classes it most properly belonged, yet in general a much more generous diet was absolutely requisite. Thus even smoaked beef or bacon has proved beneficial in it, chiefly indeed to persons who by pinching poverty have been long debarred its use. These likewise often find the fat of old bacon boiled in new milk an expeditious cure. Similar to this I have been informed by an officer of the army, that at a time when the dysentery made great havock among
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EPIDEMICAL DISORDERS. 115

the soldiers, many who were given up as lost, having tried every remedy in vain, obtained immediate relief by drinking the fat skimmed off strong mutton broth. It must be remembered however that the disease had most probably degenerated into the second species.

During the autumn and winter 1769 a disorder prevailed which they call here the chicken or swine-pock according to the size of the pustules, it is likewise named nerls or blibes from trifling differences in the appearance. The first symptoms and even the beginning eruption in some cases resembled the small-pox so nearly, that they were only to be distinguished by knowing which distemper prevailed at the time, and by the want of that peculiar smell which I have always found accompany the latter. In general however the disease was milder, and it never proved fatal. The stomach was often affected with a slight nausea, the head with heaviness,

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the eyes were dull and languid, and the fever various and remittent. The feverish symptoms when high did not abate immediately on the eruption, but as soon as they did, no return of them was to be dreaded. The eruption usually happened on the second night, and so early as the third night or fourth morning the pock assumed a pimply form, which readily distinguished it from the small-pox. It commonly dried on the sixth day, yet I have known cases wherein the symptoms running high, the pock growing large and filling with yellow matter, it remained until the seventh or even eighth day, so as to be mistaken for the small-pox, and to have matter taken from it for inoculation. A similar error may have induced some to believe that they really underwent the small-pox a second time, neither disorder being perhaps ever caught twice. In some instances the eruption was kept back by purgatives and a cold regimen for a day or two, and incredible as it must seem, even

even longer; in such the fever ran high, the head was greatly affected with pain and aching, the eyes were inflamed and could not bear any light, and there was a frequent and violent inclination to vomit; these all went off quickly on using wine-whey, and a sweat attended by the pock breaking out.

In the spring of the year 1770, consumptions were not unfrequent. Young men who have in a short time after the age of sixteen increased remarkably in height are very liable to this complaint, such therefore should be carefully attentive to any coughs they may be seized with during spring or autumn, until they pass their twenty-fourth year. In the fair sex the disposition to it begins a year or two earlier. The kind of the disorder most commonly met with here as well during this as other years, was such as took its origin from a bad crasis of the blood rather than from any inflammation of the

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lungs. In many cases this seemed to be derived from a previous gonorrhœa, of which the person thought himself completely cured a year or two before. That this disorder will sometimes lie hid in the body for years, and afterwards break out with great malignity is well known to practitioners; in which case the matter has perhaps stopt in some of the internal lymphatic glands, until accident or time resolving it, the blood becomes suddenly infected with the poison. This opinion surely seems more probable than that it should have remained so long in the course of the circulation without shewing any bad effects, or without being expelled by the secretory organs. In confirmation of this a medical gentleman has assured me that he saw a case wherein one of the inguinal glands had been hardened during a gonorrhœa, in which situation it remained for several years after all appearances of the disease were gone, when although the person had not exposed himself to any
fresh

infection, yet immediately on its being resolved he shewed every sign of a virulent pox. I would therefore advise every physician when called to a tabid patient whose manner of life may have thrown him in the way of such a disorder, carefully to enquire whether they ever had any venereal complaint, as it is never to be disregarded in the prescription. This phthisis though it did not differ materially in its symptoms from those species to be described hereafter, yet required a very different treatment; mercury being the sole refuge in it, which never failed performing a cure when taken before the lungs had inflamed and suppurated. After this I cannot say I have been so bold as to prescribe it, but am assured that a French physician has done it with success. The way in which I found mercurials answer best was by giving small doses of them as alteratives: calomel was the preparation most frequently used.

In some cases the consumption was derived from a scrophulous habit, and in others any indisposition greatly weakening the solids seemed to give it birth. From having caught a slight cold usually in summer the patients were afflicted throughout the harvest with a troublesome but not violent cough; their spit was of a disagreeable smell and taste, and often of a blueish colour and jelly-like consistence; they found a chilliness without any hectic heats; their pulse was not high but quick and soft, nor thirst great; and their appetite and spirits entirely forsook them. In this way not being sufficiently alarmed or rather too languid to ask medical assistance, or take care of themselves, they continued for some months until their lungs began to shew signs of inflammation. Though in the former part of the disorder they had little hopes or thoughts of life, yet many now gained great confidence, which to them proved as detrimental as their former languor, in preventing their obedience

ence to directions. This confidence was often beyond measure surprising, inasmuch that I have seen some who a few hours before death were not to be convinced by all the arguments of their friends, or assurances of the physician, whose abilities they otherwise respected, that they were in any danger. I know of no circumstance in the profession which often requires more prudence in a medical practitioner, or costs a man of feeling more anxious thoughts than this single one. In many disorders where the smallest apprehension of danger may be really prejudicial, he must be extremely cautious of allowing even his looks to betray any part of his inward sentiments to the patient ; and though no man of honour can bring his lips actually to belie his heart in answering the patient's enquiries concerning his situation, yet the utmost of his address may be employed in warding off all such questions as he cannot reply to directly, or in giving such a
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turn to them as may not prove unfavourable to his design. Such behaviour springing from so generous a motive, does not deserve the name of dissingenuity. But in the disorder before us, when no bad consequences can arise from giving his opinion in the plainest terms, how devoid must that man be of the tender love of human nature and kindly warm benevolence of christian principles, who can see his fellow creature going unawares into eternity without warning him of the awful journey he is about to take ! It is true the physician will thereby often get the ungrateful ill-will of the dying person, and even his relations, who from mistaken affection wish their friend to pass his small remaining time in unfeeling tranquillity, and if gain be a man's sole motive in following the healing art he will do better in keeping his thoughts concealed : to such I write not, and hope these disgraces to the noblest profession upon earth are few when compared with its humane and candid ornaments.

The distemper preserving an even progress they now begin to perceive a pain in one of their sides, though in some this symptom never appears, their spittle becomes streaked with blood and purulent, and a hectic fever and diarrhæa ensuing with all their concomitants mostly close the tragedy about the month of March, the last scenes being often accompanied by a slight desipientia.

The course most successfully pursued in this disorder, when no suspicion of any venereal taint interfered, was the following. Frequent small vomits were given to rid the stomach of a viscid phlegm with which it was much loaded, and which was perpetually exciting nausea and vomiting. Though these were only used as palliative remedies, yet their effect was often so great, especially when the stuffing was more considerable than the pain in the breast, that I have been induced to think with some, the fomes of the cough lodged in the stomach. Along with these a judicious

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dition exhibition of sulphur and the Peruvian bark was the method most depended upon. Sulphur seems almost the only laxative which does not diminish perspiration; neither does it raise any degree of heat. The good effects of it in coughs are great and certain, there being scarcely any recent ones which it will not remove in a few days, and when joined with the bark, proper diet and exercise, few consumptions that are not advanced to near the last stage will resist it. The common objection against the bark, that it would render the cough more difficult, from a mistaken notion of its astringency, did not prove a just one. Whenever there appeared any great difficulty in the breathing, I did not venture to prescribe it, and in whatever other case it was found to produce any degree of stuffing, its use was discontinued, but this last scarcely ever happened. In the beginning of the disease, it promoted the regular cutaneous discharge, renewed the decayed appetite, and
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gave strength to the relaxed solids; and in the latter stages it promoted a laudable suppuration, and checked those hectic sweats which so greatly waste the patient. Many cases which from want of proper attention, or too great occupation in business had been suffered to continue so long, as to give the strongest marks of suppurated lungs, were relieved by this method, beyond the hopes of the person's friends, or even the physician who prescribed it; and surely a medicine, which from all its known qualities promises so much, deserves at least a trial. It was frequently joined in an electary with the sulphur, the latter being so proportioned as to prove gently laxative, and to them was often added some of the least heating balsamics, which in that way seemed to do well, though when depended upon singly, they never produced any apparent good effects. This form however being often inconvenient and disagreeable, the sulphur was given alone at night, and the bark either in decoction
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or watery extract during the day. Elixir of vitriol was frequently added to the bark, in order to diminish the hectic sweats, but it was not a little remarkable, that on first using them they mostly served to increase what they were given to lessen; in a few days however they shewed their natural effect. This appeared most evidently in subjects who had been previously much wasted by the distemper. The elixir was often laid aside on account of rendering the cough more bound, and aggravating the incurable rawness which at the last infested their throats.

When the pain in the breast was considerable, and the fever higher than ordinary, it became necessary to draw blood every ten days or a fortnight. In doing this, great attention was paid to the patient's strength, the loss of three or four ounces being oftentimes as much as he could bear. The drawing of so small a quantity however lessened very much the pain and feverish heat. Frequently the degree of these, and hardness
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of the pulse demanded a larger evacuation, at which time six or seven ounces might be safely taken away, the height of the fever seeming to supply a strength which could not be expected in so emaciated a body. If the blood discovered great fizziness more caution became requisite in administering the bark.

Another salutary thing objected to by many was the wearing of flannel next the skin. The disorder being attended with sweats, they imagined that it would increase them, whereas nothing could have a more opposite effect. Perhaps these morning perspirations take their birth from that discharge being entirely stopt during the day, and nature making a push to relieve herself and open the closed pores at night: whatever therefore tends to keep up an equable discharge, prevents the necessity of a struggle. The evening fever and violent paroxysm of coughing, which commences frequently on the patient's going into bed, may also arise from the
same

same cause; the latter however seems connected with the exposure of the skin to the air, when the person throws off his wearing apparel, as on causing a gentleman to make the experiment, I found that when he went into bed without taking off his cloaths he escaped the paroxysm, whereas whenever he threw them off, although the bed was carefully warmed, he always had the most violent one I ever saw.

In phlegmatic constitutions, when there were few signs of inflammation, I have known tar water serviceable, its cordial warmth proving very grateful to the stomach, and amending the appetite. But in cases attended with considerable fever, I prefer tar pills to it, as they are less inflaming, and have balsamic virtues which the other wants. To me it seems clear from experience that water does not extract all the qualities of tar, the heating parts are principally taken up, which we would here by all means wish to avoid.

Goats

Goats whey proved also eminently beneficial in all stages of this disease except the last when the colliquative diarrhæa had appeared, or when the lungs were considerably stuffed, as it is called, with a tough phlegm, in which case I have known a large draught of it increase the difficulty of coughing and breathing almost to suffocation. Its laxative powers served greatly at other times to abate the attending feverishness, but in the last period no prudent person should enjoin its use, as instances have occurred wherein an unhappy person has been hurried out of the world with greater expedition by its means. I always order it to be drank in mountainous places, not that I imagine the milk of goats is materially altered in its qualities on account of their different browsing, as has been commonly alledged, but for the change of air. The breath of all animals contaminates the atmosphere around them. Thus when a number of persons are shut up together in

a small room, dreadful putrid disorders sometimes arise: we likewise find large cities more unhealthy and subject to these complaints than country places. And though to a man in strong health the air of a well inhabited country may seem sufficiently pure, yet the too sensible delicate lungs of a phthifical person may find the matter otherwise. My chief reason however for believing the air of these uninhabited parts to be of great importance in the cure is, that I have had several patients who after arriving there were unable to use the whey, either from its disagreeing with their stomach, or its proving too purgative, and yet found great advantage by residing in the place. Care was taken to have the whey clear, and that it produced a gentle lax: where it had not this effect, the addition of medicines was necessary, and of these the mildest were always most proper. With these cautions some persons may indulge in large draughts of it, but it should never be drank in such quantities

quantities as to swell and overload the stomach or prove strongly purgative. When used in this way I have seen few superior remedies in the disorder.

I have already mentioned the little benefit to be expected from balsamic medicines. Oily mixtures were rather hurtful, as they clogged the stomach already overcome with a load of phlegm. Another reason for the bad consequences produced by them seems to be their rancidity, it being next to impossible to procure any oil which to a palate not depraved by a long use of it, will not betray some marks of being rancid. Whenever I had occasion to use oily medicines in the country, I found none so good as fresh made butter, and have been much surprised to see some physicians forbid its use, though prescribing at the same time oily mixtures. That the latter are not so proper as the former, we may argue also from the stomach's bearing but a small quantity of them, whereas in butter we are scarcely at all

confined. Butter however which has suffered the action of the fire, or been preserved long with salt, appears to me very improper, as its qualities are thus entirely altered. Opiates had this bad effect, that they increased the fever and rendered the body costive, a thing to be carefully avoided in every stage except the last.

As to the diet, milk had one great and unconquerable inconvenience; which was its turning into phlegm upon the stomach, nor could there be any medicine found to obviate this pernicious tendency. In the first stages of the complaint, when fresh meat was allowed with propriety and advantage, this bad consequence was not so conspicuous: but whenever any signs of inflammation in the breast obliged the patient to confine himself chiefly to a milk diet, it never failed to give constant trouble. It was necessary to get rid of this phlegm by means of the repeated vomits before recommended, otherwise if left to itself, it increased the cough, and every morning
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on the patient's rising from bed created a vomiting or violent and repeated reachings. Shell fish I have always found most excellent food in this distemper, and knew an instance of a person cured by living solely upon oysters, the hectic fever, thirst, and a violent pain in the side abating on the first hearty meal. It was indeed a woman; that sex though much more liable to the complaint being apter to get rid of it, nor do I know any stage wherein I have not seen some of them recover. Matrimony proves to them mostly a complete cure, yet it has returned to many in two or three years afterwards. These always died, though often the advance of the disorder was very tedious, and they bore two or three children during its continuance. I never saw one who died of it whilst pregnant, but several did not survive delivery many days or sometimes hours. These seemed to go off with a peripneumony, more violent than their small strength could be expected to raise.

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The infants were extremely little, and so weak that they seldom lived twenty-four hours. Contrary to received opinion I have seen many women regular in their menstruation until nigh the last stages of it, and at other times when they were not so in the beginning, they had some returns of this evacuation towards the close.

During this spring the measles were very common. They differed in few respects from those mentioned before, except the fever's not running so high, and there being a greater tendency to a diarrhæa, to diminish which, opiates were often necessary. The country people remark that they are very apt to precede immediately or follow the small-pox, as happened both during the former constitution and the present.

Early in summer 1770 the small-pox began to rage, and continued until the midst of the following winter. Their not com-

committing such devastation as the former ones in 1766, was more owing to the want of subjects for them to exercise their fury upon, the preceding disorder having left few who had not undergone the malady, than to any abatement in their malignancy. The symptoms in each were not entirely alike. In the present species the stomach was more affected with sickness; nausea and vomiting in the beginning, the fever did not run so high and it remitted; the pulse was indeed quick but not strong; the head was much affected with heaviness and aching, and the whole skin had often a lurid hue, and was not very hot, but at intervals. The eyes were dull and languid, more frequent purple spots and hæmorrhages attended upon them, and watery chrystalline pocks were often to be seen. The delirium was rather of the low muttering kind, the hands and face did not swell considerably, and when the person died it was seemingly by an universal mortification, the pulse having en-

tirely ceased some hours before, the extremities grown cold, and the patient without complaints, appearing rather to fall into a placid sleep. Though from this description a person might imagine that a physician could easily distinguish between these small-pox and those mentioned in the second chapter, yet it must be remarked, that the account of the symptoms in both kinds, is taken from such cases as most plainly pointed out the nature of the epidemic, and that a practitioner daily met with cases in each so nearly resembling the other, that no investigation of symptoms alone could have ascertained a material difference. This likewise happens in other feverish complaints, and makes our accurately studying epidemic constitutions of the utmost importance in medicine, as without it a physician will frequently commit the most fatal mistakes, by directing his prescriptions to the apparent symptoms, which should have been pointed at the known nature of the epidemic. The danger

danger both in this and the former kind was not to be estimated so much from the number of pocks on the whole face, as their appearance on the upper part of the forehead, about the junction of the hairy scalp with the smooth skin, since if any were distinct there and filled properly, little was to be dreaded.

On attending to these symptoms of languor, it may be conceived how difficult it was for a physician to make himself obeyed, when ordering a patient to be kept cool in a country where the warm regimen seemed to have fixed his head quarters from whence he extended desolation far and wide. No sooner did a person complain of the first symptoms of the small pox than confining him to a bed, from whence death alone mostly gave him a release, his attendants endeavoured with all the might of saffron, warm drinks, and spirituous liquors to procure a speedy eruption. In this they too often fatally succeeded even on the morning of the second

cond day; but along with the pock or soon after it purple spots appeared. Then not doubting of the malignity they flew to the assistance of higher cordials, until at last the patient died of the medication, sometimes so early as the fifth day. Their treatment of other feverish complaints was exactly the same, sweating was their sole intention, sweating the only method of cure known to them, if cure that could be called, which proved so highly destructive. All access to fresh cool air was denied, lest the patients might receive cold, and by means of doors carefully kept shut, small rooms, and close drawn curtains, they were stewed in their own unhealthy exhalations. No purgatives nor clysters were allowed them, nor the smallest quantity of cold drink given to cool their parched tongues, and ease extreme anguish. Whenever pain or delirium seized the head, their recourse was immediately to blisters without distinction of cases, or consideration of other symptoms. If the disorder

disorder increased, as commonly happened, more were applied until from a state little inferior to good health, the unhappy sufferer was thrown into a violent phrenzy, and hurried out of the world on the fifth or sixth day, with not less perhaps than six or eight blisters upon him. Emetics indeed were sometimes allowed of, but upon the same ruinous plan great care was taken to prevent their operation downward. Volatiles were likewise given inwardly to relieve the head, and wine whey and cordials to obviate that weakness, which if duly considered would have been found to arise from the greatness of the disorder, and not from any want of muscular or nervous strength. Nothing can have more fatal consequences than confounding this dejection in the beginning of fevers, which arises solely from the powers of nature being oppressed by the violence of the disease, with that which accompanies the close of tedious fevers. The antecedent causes will soon point out the

the distinction, and should they not, it will be taught the reflecting physician by the different success attending the same treatment in both stages.

From this by no means exaggerated account of the practice here, it must be evident at first sight how many discouragements a person laboured under, who wished to introduce the cool regimen; these however in the present case were multiplied tenfold, and often indeed proved insurmountable, as it became necessary to go one step farther in direct contradiction to the prejudices of the people, which was exposing the patient to cold air. Fatal experience having demonstrated both during the former and present visit of the small-pox, how inadequate even the cool regimen as enjoined by excellent physicians, was to allay the violence of this dreadful distemper, some new method must be sought for. For I have ever held it a base desertion of the dearest interests of mankind to go on in the same unsuccessful track

track because it may be conforming to the opinion of some great physician : Reason forbids it ! Conscience abhors it !

The unparalleled success attending exposure to the open air in the inoculated small-pock gave great reason to hope for similar effects in the natural one, and the case of Baron Dimfdale's child, though the only one which I knew of at that time wherein it had been tried, added still some farther probability to these expectations. The encreasing mortality determined me to try it, and I have always both then and since found it have as certain and great good effects in the natural one as in the other, proper allowance being made for the greater severity of the original complaint. The first instance wherein I had an opportunity of trying it to the utmost extent was in a farmer's daughter to whom I was called the second day of the complaint. She was nine years of age and had a violent inclination to vomit, complained of a pain in her head and back,
and

and though formerly a fine lively child, could not now raise her head from the pillow. Her skin was rather warmer, and fever higher than commonly appeared in this epidemic. Notwithstanding she had sickened only the preceding day, yet many pocks had begun to appear in the face, and innumerable others could be felt under the skin. I found the parents deliberating whether they should give her spirituous liquors in order to strike out the pock; this however I came time enough to prevent, and luckily for the girl they were so well apprised of her dangerous condition as to allow any method to be pursued which I should advise. Finding that she was costive, I ordered a clyster and such physic as could be taken in a small size, to be given immediately. On the following day her stomach seemed relieved by the operation of the physic, but the other symptoms were no way abated, and vast numbers of the pocks began to appear. I therefore ordered her to be dressed and
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taken into the open air. During the first hour she was incapable of walking, and was carried to and fro in a man's arms; her spirits however seemed lighter from the beginning, and so soon as she could walk, she became playful. Every means was taken to encourage this disposition, that she might thereby be allured to exercise. Her eyes were now clear and lively, her pulse full and not so quick, and she began to have an appetite. On her being a little fatigued she was taken into the house, but she quickly perceived the difference, being immediately oppressed with heaviness and sickness, and earnestly requested to be taken out again, from which she a second time received speedy relief. The advantage of fresh air was now so apparent to herself that I am convinced we should not have been able to keep her within doors had I required it; but nothing could be farther from my intentions. Her own little degree of thought made her dread the necessary confinement to bed
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which the night would occasion, and indeed I was not without some apprehensions on that account myself; nevertheless she passed a tolerable night, being vastly easier than during the former. Next morning I found her in good spirits amusing herself without doors, but what surprised me much was to perceive the number of pocks which the first symptoms gave reason to expect, not at all lessened by such constant endeavours to repel them; in fine she was entirely covered with them, nor have I ever seen upon any person a greater quantity. After the second day of this treatment her fever entirely disappeared, her appetite was good, and when asked whether she had any complaints she said she had not. Food was provided for her of a light vegetable kind, and a clyster was administered whenever she became costive. About the sixth day some claret was added to her drink, the quantity of which I allowed to be gradually increased as she remained without fever. During the whole stage of maturation,

turation, she complained of much forenefs in the pock, but it did not hinder her from uſing exerciſe in the open air. On the tenth day I thought it moſt prudent to confine her to the houſe, for fear of the pock going ſuddenly inward. This reſtraint would have been intolerable, but that ſhe was now blind from the ſwelling of the face. Though confined ſhe had ſcarcely any degree of ſecondary fever, and never loſt her appetite or ſpirits. She had little ptialiſm, her hands and feet ſwelled more than could have been expected. The pocks were altogether of a confluent kind, covering her face in one continued ſcurf, and after they were gone it appeared how malignant they had been by the deep marks and ſeams which they left behind.

This was the method I afterwards purſued whenever called in proper time, and the prejudices of relations could be ſo far conquered as to prevent their regulating the conduct and preſcriptions of a phyſician. Often muſt a practitioner give up

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his own opinions and practice, yet afterwards suffer all the blame if the method forced upon him does not succeed. But let every man beware of this cowardly conduct, as none will be readier to reflect upon him than those very persons who were most forward to influence him to it. And indeed their common outcry is not unreasonable, though it may be very ungenerous. Why, if he disapproved, did he permit it? was it to direct or be directed by them that they employed him? It is true if his plan on trial fails, the outcry will be much greater, but in this case he has the firm support of his own approving mind. I would however recommend it as a prudential step in these cases always to request a consultation with some other physician.

It must not be concealed however that one inconvenience sometimes followed the use of so cold a regimen, for it was succeeded by an obstinate dry cough: the same complaint was brought on by a similar treatment in the inoculated small-pox: but

but I have never seen it fatal; summer weather and a milk diet, or particularly the goats whey always relieving it. Rheumatisms and sciaticas have though very rarely been the consequence of this method when the patient had taken any thing mercurial either preparatory or as a purgative in the beginning of the disorder. For them time proved the best and never failing physician.

I cannot say that I have often seen opiates of any great service in this disease. The present relief which they give from pain and uneasiness is not to be considered in this light: the sequel shews that the cause still exists, though for a time the brain is prevented by the stupifying dose from perceiving it. By them the fever is increased from whence the principal danger arises, and every return of the symptoms is more violent, until at last they become too powerful for the medicine. Besides, if we begin to give them so early as even the sixth day, we may find about the eleventh when sometimes

they are absolutely requisite, that from custom nature is then become insensible to their powers. The time may appear rather too short to produce such an effect, but I am convinced that it has happened to this remedy oftener than is commonly imagined.

High spirituous cordials I have ever found hurtful, except in one particular circumstance of the disorder. When about the end of the time of maturation the pock suddenly subsides, the skin growing pale and the swellings abating in the face and extremities with an exceeding low quick pulse, and often vomiting, hiccough, delirium, or convulsions, and other symptoms which are thought to arise from the variolous matter falling upon the internal parts, then cordials have an excellent effect. But even here I prefer a large quantity of claret or any other sort of wine warmed sufficiently, to much stronger and more spirituous ones. I have known cases of children who were grown cold and unable

able to swallow, with seemingly the last breath quivering on their pale lips, who have been revived by this being forced down their throats in so great a quantity as a pint. I have likewise known an emetic of hippocacuanha or squills, but especially an antimonial one do well. I cannot say that I have had much reason to commend opium in the case, though so powerful acordial.

In these instances which I have mentioned, the pock and swellings had subsided speedily perhaps in one or two hours; but another and much worse case was where they subsided more gradually as in eighteen or twenty four hours with the same bad symptoms. This often happens, and I know of scarcely any remedy for it: an antimonial so managed as to produce a sweat with the assistance of wine has been tried, but seldom found to answer.

In this cold moist climate, where most of the inhabitants live on poor and watery food, it did not surprize me to meet with low fevers, which were epidemic during this constitution, it rather seemed more wonderful that I had not seen any of them before. But the uncommonly dry summers of 1761, 62, 65, 66, had given a different cast to the disorders of this country.

In the beginning of this fever, it seemed so slight that the person though not well, could scarcely complain of any particular ailment, his appetite only was not so good as usual, and he was somewhat chilly and low spirited. When the fever began to appear more plainly, its resemblance to a common intermittent or ague, became very remarkable. The same lassitude and yawning, nausea, heavy pain and swimming in the head, and shivering succeeded by heat: but in this all the symptoms were slighter, and the paroxysms of
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short duration, returning with great frequency and uncertainty, neither did they sweat nor vomit. The pulse was weak, a little quickened and irregular, but seldom intermittent. These two stages lasted very unequally in different persons, generally however bearing some proportion to the length of the subsequent disorder. From the beginning many had a slight lax without any considerable gripings; these now increased, and they began to have a tendency to clammy sweats. Their pulse became very unequal, quick and weak, their urine pale and crude, their head much affected with desipientia, their eyes languid and as if falling asleep, yet they were perpetually watchful. Their tongue, which through the whole distemper had been moist but whitish, appeared darker and covered with a much thicker mucus, and they drew deep and frequent sighs. In this third stage white miliary eruptions were very frequent. These never produced any alteration for the better, but

shewed that the disorder would prove a very tedious one. I have known instances of their breaking out every eight or ten days for some months, during all which time the patient languished under the malady.

I cannot say that I ever saw a crisis by sweat in this distemper; a diarrhæa if very gentle was serviceable at any period of it, inasmuch as never to be checked with safety, and though in the beginning it did not seem sufficient to carry off the offending cause, yet toward the end it often proved completely critical. The best signs of recovery were the skin growing equally warm, the urine higher coloured, the pulse fuller, but particularly the tongue clean and red, and I have observed that in all low fevers a more certain prognostic was to be drawn from the appearance of that organ, than any other symptom whatever.

One not unfrequent appearance in the urine was a cloud that in the beginning subsided towards the bottom of the containing

taining vessel, this in each succeeding quantity rose nearer to the surface, and at last disappeared; it was always a forerunner of considerable delirium, which might be foretold long before the urine became entirely pale. The same remark I have often made in malignant fevers, when the urine has been at the first extremely turbid.

When the tongue and lips grew black, the fauces aphthous, the skin covered with dark coloured petechiæ or vibices, which indeed were seldom seen; when there were cold profuse sweats, twitchings of the tendons, and picking at the bed-cloaths with little or no pulse, in this last miserable stage death might be pronounced near at hand.

This fever, though it bore a very near resemblance in all its symptoms to the nervous one as described by doctor's Huxham and Gilchrist, yet differed materially in two respects; one of which was the degree of danger attending it, as I have not known an instance wherein a proper treatment

treatment was fallen upon before the last and mortal symptoms appeared that did not terminate favourably. Another difference was in the management, that being almost entirely opposite to what is laid down by those two authors.

An accurate consideration of the symptoms which all tended to shew a collection of some depraved humours in the primæ viæ, together with a just attention to the reigning epidemic, which was the dysentery, sufficiently pointed out the method of cure proper in this disease. But though emetics and purgatives seemed strongly indicated, yet great care was requisite in their exhibition. None but the mildest vomits could be suffered, and even they sometimes had their inconveniencies, the confusion of the head being very readily increased by them. This was the more troublesome, as when any advantage was expected, a frequent repetition of them became necessary. Harsh strong purgatives were likewise injurious, bringing on amaz-
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ing faintness and weakness, yet a long continuation of gentle laxatives seemed to be the true method of treatment. I have ever observed that when a distemper began slowly, our attempts to get rid of it should be by slow and cautious means, swiftly operating medicines only waste the strength in such cases, without procuring adequate relief: thus in chronic disorders we prudently change the rapid emetic and purgative mercurials into creeping alteratives; thus also I always found strong antimonials hurtful in this kind of fever. We are for this reason to have great respect to the age of our patient. People when advanced in years find the effects of any offending cause and throw it off much more slowly than they did in the vigour of youth. Several elderly gentlemen have assured me that for twenty-four or thirty-six hours after catching cold they were always found stronger, their faculties more alert, and would have thought themselves in better health, had not

not frequent experience taught them to suspect a latent malady ; but that at last when it began to shew itself, the very same disorder which formerly they would have shaken off in two or three days, now remained upon them as many weeks, notwithstanding their greater care and attention.

Lenitive electary, soluble tartar, sal de Rochelle or Glauber's salt were the laxatives mostly given in this fever, and with one or another of these the lax was supported many days. At first little apparent advantage was perceived from them, excepting that the patient did not grow worse ; and to those who must shew their cleverness by always making a speedy cure, this was a sufficient objection ; the careful physician however, who had patience to wait for their slow but certain benefit, ever found reason to be satisfied. It is true the success was not so brilliant, his patients seldom having any violent symptoms, inso-much that I have known many treated in
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this way, who would not allow that it had been a fever, alledging that it was only a languor from indigestion. He was likewise in danger of having his motives misinterpreted, as if attentive to private gain in preventing his patients taking those things which seemed, though falsely, to promise a speedy recovery. To balance these he had but one comfort, that however a sufficient one, drawn from the fatal miscarriages to which he saw all other methods liable. I hope it will not be understood that I mean to recommend that trifling which I am afraid is too often practised in the beginning of most fevers. Ju-
leps, draughts, saline mixtures, &c. may be of excellent service to swell the apothecary's bill, and get his recommendation to other families, but in gaining this, time and the patient's strength are often lost beyond recovery. In most fevers which appear in this climate, a physician should be decisive at the very first, and not wait for those efforts of nature which seldom hap-
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pen, or at least not whilst the patient has strength to bear them. Yet there are cases where prudence requires, not indeed his lying idle, but his proceeding in a slow manner, of which the disorder before us affords an example, and to these every practitioner should be able Proteus like to adapt himself.

It may appear odd that I have not as yet mentioned wine and cordials, those remedies chiefly relied upon in the cure of such fevers. The truth is I never saw them beneficial in the first stages of these complaints, and I seldom met with the last stage as described by authors where they had not been previously used, and given great assistance to its production. This they effected chiefly in my opinion by preventing that salutary lax, to which nature of herself was so prone; whereby the fomes of the disorder was retained within the bowels: certain I am every medicine became beneficial or hurtful as it promoted or checked that discharge. There
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was a moderation in the taking of cordials required to give rise to this stage of the disorder, they otherwise killed before the disorder had continued such a length of time as to be called a nervous fever, which perhaps may be the reason why the ancients were unacquainted with this complaint. Although I have said that cordials served greatly to bring on the last stage, yet what may seem very unaccountable, when that had once arrived they became absolutely requisite; and I much fear that the necessity of using them here, and at one other time to be mentioned immediately, has been unjustly transferred to the beginning of the disease when I never saw them serviceable. Besides to be over cautious in prescribing cordials is erring on much the safest side, as I am convinced the being too speedy in giving them has killed a thousand times as many persons as the opposite excess. Allowing the patient's strength to sink altogether is without doubt improper, yet I have scarcely ever seen any degree

gree of languor in the close of fevers which could not be recovered from, except such as had been produced by the intemperate and early use of those so highly praised remedies. It may I think be ever held a maxim that in all feverish complaints the patient's weakness is not to be computed from his own feelings nor the pulse, these often only shewing the greatness of the disorder, but from the length of the malady compared with its violence, and having a just respect to any great evacuations which may have happened: an attention therefore to these circumstances will be our best guide in directing cordials.

I have mentioned my finding these medicines proper at an other time which was when the disorder was gone, or at least so far abated as to leave little worthy notice but the weakness. In this case cordials and generous diet had most excellent and immediate effects, and even such things as would seem ill suited to a weakened stomach and digestion, as a rasher of salt beef

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or bacon, with a cheerful glass of red wine, gave sometimes strength and spirits beyond all other things. A physician should be watchful to perceive this change in the disorder immediately on its happening, as I have known instances wherein a person of very inferior skill by pointing it out has gained much reputation; the opinion of the sick person and his friends being, that the former physician had from the beginning mistaken the complaint, and that had the other been called sooner and his method followed, the case would not have proved so tedious, whereas in reality his practice only became proper at the very time he arrived. The attending physician will ever be under a disadvantage as to perceiving these changes, the first and just idea of the disease not being readily laid aside, and the smallness of each alteration rendering him less sensible of them all accumulated; thus we find ourselves not so good judges of the variations in the counte-

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nance of one whom we see every day, as of him whom we meet seldom.

As to the miliary eruptions which accompanied this fever, I did not perceive any alteration in the treatment requisite on their account. It was difficult to determine to what stage of the disorder the time in which they appeared should properly be referred, I therefore found that though gentle cordials were to be given, as in the latter stages, to support the failing strength, yet laxatives were still absolutely necessary, especially if they had not been insisted upon long enough during the former part of the cure. A miliary fever has been described by some writers as a distinct disorder, but in this I apprehend they have mistaken a symptom for a disease. No two fevers could differ more essentially than the one described in the first constitution, and the present, yet both were equally accompanied by miliary eruptions. In the first indeed the red kind
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was most frequent, yet the white was often seen, and in the present malady the red was not uncommon. Let us then not confound distempers of opposite natures on account of one concomitant symptom; as well might we apply the same name and treatment to the jail fever and phrenitis, because of the delirium which appears in both, as to the different cases in which miliary eruptions shew themselves.

Before I dismiss this fever I must mention my ranking Peruvian bark highest among the medicines which proved serviceable in its later stages. Of the preparations an infusion in red-wine shewed the greatest efficacy. Its usefulness may perhaps assist in shewing how improper all such things as provoked a sweat were in the disorder.

Whilst this disease prevailed among those who were grown up to maturity, another much more severe reigned among children, by some called a worm fe-

ver. Though I believe worms were seldom the cause, yet as that apparently lay in the stomach and intestines, the error did not materially affect the practice. Children highly pampered with luxuries were very liable to these complaints: being mostly of a thin habit and fallow complexion, much and strong food was thought necessary to nourish and support them, whereas no method could be worse adapted to furnish them with real strength and nourishment.

The leading symptoms of this were heat, thirst, quick full pulse, vomiting, coma, and sometimes slight convulsions, an universal foreness to the touch, and a troublesome phlegmy cough; they were likewise extremely peevish when not comatose, this was not however so good a sign, as it is always found in the feverish disorders of grown persons. The fever accompanying this disease was constantly of the remittent kind, the cheeks often appearing highly flushed, at other times very pale;
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it lasted for several days, but seldom beyond a week, nor was the fatality attending it very considerable. Many of those who were seized by it had been subject for a length of time to symptoms which are thought to point out the existence of worms in the *primæ viæ*, as picking the nose, grinding the teeth, starting out of sleep, swelling of the belly, white urine, short dry cough, &c. yet worms scarcely ever appeared.

I have found the greatest difficulty to distinguish this complaint from the hydrocephalus internus in children who have not arrived at the age of five or six years, and am convinced that the latter disorder is more common than generally supposed. That there is lymph always lodged in the ventricles of the brain I will not deny, yet cannot think the small quantity of this ever found there in those who did not die of that disorder, can be mistaken for a morbid appearance by the most superficial observer. The distinction I believe is often imprac-

ticable until within a day or two of the fatal period, when the dilatation of the pupils and insensibility of the eyes to light point out the latter disease too strongly to be mistaken. In these doubtful cases though a person should never lose sight of the possibility of water being collected in the ventricles of the brain, particularly in forming his prognosis, yet as to their treatment I make it a rule never to proceed upon that opinion; as in every complaint where we are doubtful to which of two causes it should be referred, if one of them is certainly fatal, even though it should be the most probable, no advantage can arise from our being guided by that supposition.

Two things were chiefly to be regarded in the cure of this disease, the height of the fever, and affection of the stomach. For the first, plentiful bleeding was always necessary, after which the remainder of the cure was entirely trusted to rhubarb. The powder of this was mostly given in small
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doses every second or third hour until it operated downward, nor did its being thrown off by vomit intimidate me from proceeding, as by perseverance it never failed of the proper effect. So much of it was likewise taken every succeeding day as kept up a constant lax. Whenever an acid was suspected in the stomach magnesia was joined to it, and if worms seemed to be the cause, a small addition of calomel was thought not unnecessary, and in the event appeared beneficial.

Pleurifies and peripneumonies had begun to abate in frequency during the last constitution, and I likewise thought I could perceive a slight change requisite in their treatment, a free use of the lancet, not being so strongly indicated. In the present constitution they were still more rarely to be met with, and the method to be pursued in treating them was totally different from that formerly mentioned, yet this difference was not pointed out by the symptoms.

toms. Thus after the first moderate bleeding, which always proved beneficial, if from the fizeyness of the blood, a remaining pain in the side, quickness and hardness of the pulse and difficulty of breathing, a practitioner was induced to repeat the operation he never failed having cause to repent it, the pulse sinking immediately, the disorder assuming a malignant form and ending speedily in death. Sudorifics were as unsuccessful, and I am inclined to imagine that the malignancy which we have been sometimes told of in epidemic inflammatory complaints, depended like this entirely upon mismanagement. A physician who did not attend to the nature of the concomitant disorders, and who was sufficiently satisfied if in his practice he followed the rules of some systematic writer, had nothing to lead him out of this labarinth of error, wherein I have known some go on, ascribing all their constant bad success to any cause except the true one, their method of treating the complaint.

complaint. The only successful way of managing the disease was the following.

Drawing of blood was requisite in the beginning; and here I must remark that not only in this, but in all other acute disorders however liable to turn putrid or malignant, I never saw one moderate and early bleeding do harm, where it seemed at all indicated by the degree of fever or other symptoms, but have often seen great mischief even in putrid disorders from the neglect of it. Whenever I perceive any inflammatory appearances attending upon a putrid complaint, I always make it a rule to overcome them as speedily as possible, being sensible that I cannot treat both classes of symptoms together, and the beginning being the only time for combating the former. After bleeding gentle laxatives were requisite in this disorder; they always brought off a considerable quantity of bile, nay in one or two cases this matter was so abundant as to create a violent vomiting, and indeed in every case where
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it was not evacuated by nature or art in the beginning it never failed exiting toward the close a most dangerous lax. I have seen some instances where in the last period from only three or four loose stools the spitting has entirely ceased, the patient indeed has thought himself better, being relieved from all complaints, but upon applying my hand to his wrist and not finding the least pulsation of the artery, I have been too well assured of the fatal consequence, which has happened in the space of a few hours. Though the expectoration seemed to me of less importance in the pleurifies and peripneumonies of this constitution than I have ever seen it before or since, yet it was never totally stopt with impunity; this consequence however did not follow the use of laxatives, they often lessened its quantity, it is true, but in return it was brought up with greater ease, the pain and difficulty of breathing abating at the same time. I was at first timorous in adding any thing antimonial

monial to the laxatives, as I dreaded a vomiting on account of the pain in the side, but this fear was an unnecessary one, and I had afterwards frequent opportunities of seeing the patient vomit without any increase of the pain. Blisters did not shew so great efficacy in removing the stitch here, as I have found at other times, nor was there any apparent difference in the danger whether the pain seized the right or left side, though in other constitutions I have always remarked the former to be most fatal.

CHAP. V.

CONSTITUTION FOURTH.

THE memory of the oldest man scarcely supplied him with an instance of so severe a season as the beginning of the year 1771; from the third of January until the eighteenth of April being almost a continued frost, with snow and an easterly wind. From thence until the end of July the weather was tolerable but rather rainy, the wind being south-west except the first nineteen days of May and the last eleven of June when it blew from the east. During the remainder of the year there fell much rain from the west,
many

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many fine days however were interspersed especially in the month of September. The first two months of the year 1772 were attended by constant frost and snow with a north-east wind, about the beginning of which there was one night of uncommonly loud thunder. Afterwards until the end of April the wind and weather were variable. The next three months were dry and warm, the wind for the first six weeks being easterly, afterwards in the opposite quarter.

The extraordinary and unremitting severity of the spring 1771 brought back genuine inflammatory pleurifies and peripneumonies, from which the country had been mostly free for three preceding years. In these there were frequent opportunities of seeing confirmed the practice laid down in the first constitution, especially as to bleeding freely at any period whilst the pain and fever continued violent, provided the pulse was not entirely sunk.

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The quantity of blood necessary to be drawn in the beginning of these disorders was not small; when eight or ten ounces only were taken the relief often appeared but momentary, in a short time necessity obliging more to be drawn, and if the same blunder was then committed a similar necessity returned soon after, and so on. Thus a patient who might have been speedily freed from the complaint by one plentiful evacuation was suffered to continue under a tedious and at best doubtful malady, till by means of the conflict with it, five or six bleedings, and perhaps abundant sweats, he was reduced to extreme weakness, and rendered liable to the disorder every succeeding spring, until in the end he fell a sacrifice to the timidity of the prescriber. This last remark I had before too often occasion to see verified, and have ever observed inflammatory complaints, particularly such as had been mismanaged, very apt to return, whereas putrid ones were not so. I often found it a good rule

rule to persist in bleeding until the patient perceived considerable remission of the pain, or that a fluttering of the pulse or faintness obliged me to desist. This method was only followed in young plethoric persons when the first appearance of the blood shewed that on cooling it would prove sily. Twenty, nay thirty ounces were sometimes taken from such in the very beginning of violent inflammations, with so great advantage that on the following day they could leave their bed, and in one or two more continue their usual occupations with the greatest alacrity. It has oft surprised me to see a person after so plentiful an evacuation very little if at all weakened, as if the disorder gave an ability to bear it unknown to health, or that nothing more than what had been superfluous was taken away. Of this let the following out of many be an instance.

A gentleman about forty years of age, of a very bulky make and full plethoric habit, from having been exposed to much
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rain and cold after being warmed with hunting, was taken ill at his brother's. On the second day of the disorder I found him complaining of the utmost difficulty of breathing, and an obscure pain in his breast which prevented his lying in any other posture than on his back with his head somewhat raised. He had an inclination to cough, but neither durst nor could indulge it; his head was confused, eyes inflamed and staring, and tongue dry; yet his skin was not so warm as might have been expected, nor his pulse much quickened though exceedingly full. I ordered an immediate bleeding, which was much objected to by the bye-standers, as they were possessed of the opinion that he had no fever. When fourteen ounces were drawn it was thought proper to desist for a few minutes, I would not however permit the arm to be tied up, but had a finger kept upon the orifice until the blood when cool shewing great fizyness, the pain in his chest becoming more violent, and his pulse

pulse increafing in quicknefs fourteen ounces more were taken from him. Thefe appeared ftill inflamed, the pain in his breaft did not abate confiderably, his pulse remained quick and ftong, his fkin became rather warmer, his tongue appeared dry, and he complained of thirft, of which he had before been too much oppreffed to be fenfible. The confufion in his head however, and ftaring protruded look of his eyes went off. In about four hours the pain and fever increafing, the bandage was unloofed from his arm and twelve ounces of blood taken away, which fhewed but little fizefnefs. He now for the firft time found himfelf relieved, faying that he was convinced bleeding had faved his life, his breathing grew eafy, his fkin moift, and he fell into a fleep which he had not enjoyed during the preceding night. After a gentle fweat he rofe next day feemingly quite well, and on the third rode eleven miles home without the leaft fatigue or weaknefs.

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Though I have advised drawing a large quantity of blood speedily in these inflammations, yet I would recommend the method practised in the last case to be frequently followed. So profuse a bleeding as these disorders often require, is a matter of most serious consideration, for should a physician be deceived in his supposed indication, the consequence might prove very injurious to a patient's future state of health, especially if he had a tendency to a dropfy, or was of a weak irritable system. A prescriber has therefore need of every evidence that can be procured in a matter of such importance. The condition of the blood, and state of the pulse after the evacuation are two the most weighty that can be gained, and these may be had even during the operation when performed in the manner before-mentioned. It is to be noticed however that even these are sometimes liable to variation. Thus the blood will at particular times shew no sifiness when drawn in the
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very beginning of an inflammatory complaint, yet when a second quantity is taken a day or two afterwards it will be covered with a very thick inflammatory crust, demonstrating the necessity of a larger bleeding at first. I have also seen the last cups shew great signs of inflammation when perhaps the two or three first shewed little or none, and this when all other circumstances as to the running of the blood, &c. which could affect its appearance were similar. The pulse likewise does not fall immediately to the standard to which the evacuation has a tendency to bring it, so that I think we should seldom with its quickness to abate entirely on the instant, as in a few hours it will mostly come nigh the usual state, and in some time afterwards become slower than natural. This change of the pulse in persons recovering from a feverish complaint should be known by every practitioner, least he may be led into mistakes ; it seems to be proper to that state, and requires neither

cordials nor stimulants to raise it. We may often know inflamed blood as it flows from the vein, by having a blueish cast, and the vapour which arises from it appearing of that colour. If we do not perceive this let us wait a short time until it cools, then we shall be able to form a better judgment of it. The arm need not be tyed up in the mean time, or if it is, the patient should be apprised of the immediate occasion there may be for opening the bandage, on examining the appearance of the blood and alteration of the pulse. Instead of being disobliged at this instance of caution it will mostly raise the physician in his esteem. Some who prescribe large bleeding in the beginning of inflammatory cases think it of great importance to draw it as speedily as possible, either from one large orifice or two different ones opened at the same time. This practice I am apt to believe depends more upon hypothesis than observation, the only material difference which I could perceive
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between it and the method before recommended was that the patient fainted sooner when it was drawn speedily; but this was often far from a desirable consequence, as we were thereby prevented from taking so much blood as was absolutely necessary. Upon the whole, after having seen both methods practised, I must conclude the proceeding slowly, provided there is no great intermission, as efficacious as the other rapid way. The greatest physician requires every help to form an accurate judgment of a disorder, let no man therefore be above considering the minutest circumstance, as the most attentive practitioner will ever prove the most successful.

Early in summer 1771, a fever began to appear which as autumn advanced, raged with the greatest violence, nor was it overcome by a severe winter, but in its irresistible course finished the circle of a year. This disorder was entirely differ-

ent from any of those formerly mentioned, claiming the prerogative of the plague, almost all others vanishing from before its sovereign presence. It had shewed itself, as I am informed, above twelve months sooner in the eastern parts of the kingdom, pursuing a regular career from east to west in the same manner as all the epidemics which I have seen. In relating this progress it must not be omitted that they made most rapid strides in marshy overflowed grounds, so that they had often got a great way onward in such places, when they were only beginning to attack the hills of more eastern parts; and as low damp grounds were soonest seized they were likewise more severely handled. Both these remarks were fully verified in the present fever, marshy places and those adjacent to them suffering most and soonest, yet the high grounds though longer protected could not claim an entire exemption from its fury.

The

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The greatest number of those who were attacked could not assign any cause except such as they had been frequently exposed to for a number of years without receiving injury, and there were not wanting those who ascribed it to infection. Many dated its rise from cold accidentally taken, especially where the feet or any part of the body having been exposed to wet they had neglected changing their garments until thereby they were greatly chilled; some of them however could recollect their having a listlessness inappetence and weight upon their spirits a few days before. The persons who caught the disorder from such sudden causes, other circumstances being nearly alike, always appeared in the greatest danger through its whole course.

The first complaints were of a languor, weight about the heart, and total want of appetite, attended with a slight degree of nausea; their head ached, and their back and limbs were infested with pains which

always went off in a day or two on the head-ach becoming more violent: the skin was soft moist and of the usual temperature, though they complained for a day or two of a constant coldness and insensibility. Their pulse was scarcely quickened, but unequal and lower than in health; in some it intermitted from the very first. The blood, when there appeared a necessity of drawing any, was somewhat fizy, and never dissolved in this period. They were mostly costive, yet the slightest laxatives procured several motions. A thin blueish film covered the tongue as if a mixture of milk and water lay upon it: the urine was remarkably turbid, whitish in some, in others like water with which brownish clay had been mixed. Their countenance and eyes were lifeless and expressive of the utmost dejection, and on pressure they complained of a foreness in the eye-balls: they were sensible of a mawkish rather than a bitter taste.

These

These were the general symptoms by which the first stage was distinguished ; in some nevertheless, principally such as caught the disorder during the winter or spring, and from exposure to cold and wet, the head-ach, thirst, oppression at the præcordia, and nausea were greater ; the pulse higher and quicker, tongue drier, skin warmer, and a violent delirium seemed approaching by the appearance of the eyes. All these however, except the head-ach and oppression, were quickly relieved on drawing a small quantity of blood, which was mostly a little fizy.

On the fourth day, in some later, the second stage might be said to begin, a desipientia now appeared, soon followed by delirium, the head-ach which had become very great began to diminish on the delirium's increasing. During this stage they were troubled with a constant watchfulness ; their eyes were wild yet melancholy and dejected, sometimes watery with little streaks of blood, at others swimming in a
bloody

bloody water. Their spirits were so very low that from the beginning most despaired of recovery; constant involuntary sighs seemed to proceed from their very hearts. The tendons of the wrist had a continual tremulous motion: the pulse became quick and extremely weak. Most profuse sweats with which their skin overflowed instead of bringing any relief served only to depress them more. Their urine became clearer at first on the delirium increasing, this change however did not continue, the tongue was covered with a thick moist whitish slime, but soon turned dry and dark coloured, the first change appearing in a black streak down the middle. Much wind seemed often struggling for a passage in the stomach and bowels. Small dun petechiæ were to be seen, principally in the bend of the arm and about the neck.

Though I mentioned the fourth day as the period at which these symptoms began, yet it is not to be conceived that there was a sudden change at any time of the disorder

order from one set of complaints to another, the disease being uniform in its progress from the beginning until about the ninth day, each one shewing the symptoms of the preceding with considerable aggravations.

About the ninth or eleventh day the distemper seemed to arrive at its height. The tremulous motion of the wrists had not only increased greatly, but communicated itself to the whole body, insomuch that I have seen the bed-curtains continue dancing for three or four days, to the no small terror of the superstitious attendants, who on first perceiving it thought some evil spirit shook the bed. This agitation was so constant a concomitant of the fever as to be almost a distinguishing symptom; and having never appeared to me at any other time it was more worthy of exact attention. There was not the smallest intermission for some days, nor was it affected by change of posture, the patients seemed in no way sensible of this; in
degree

degree it was not so considerable as the shaking fit of an ague, but generally so strong as to move the bed-cloaths and curtains. On putting a hand upon any part of the patient's body it was evidently to be felt, and to be seen in the tongue when put out of the mouth, yet the speech did not seem altered. Along with this they had a frequent grinding of the teeth, both when awake and during the short uneasy slumbers which they sometimes enjoyed, and they would often convulsively bite off the edges of the vessels in which they received their drink. They now knew no one, their delirium being incessant, and muttered greatly about death and the grave, indeed it may be remarked that their delirium was always of this low, muttering kind, never rising to that high degree of phrenzy seen in fevers of the inflammatory cast. They were continually picking at the bed-cloaths with the fore-finger and thumb, which I have at all times observed to be a worse sign than grasping at any thing

thing with the whole hand. Their face was pale and sunk especially when they were most delirious: their eyes hollow, inflamed, muddy, and often so insensible that the pupil did not contract on the admission of light. The tongue and lips became black and parched, and they had great difficulty in swallowing, or even speaking, which last they could seldom do articulately. They had most profuse clammy foetid sweats, and their urine appeared as if mixed with blood. The calls of nature made now no impression on them, nor were they in the least sensible of their evacuations; this lasted for many days and in some even after they shewed great signs of amendment. The petechiæ were almost black, and often resembled the character by which chemists denote gold, having an outer circle with an inner dark speck. This circle was the first part of them which disappeared on the patient's growing better, the internal speck becoming at the same time of a florid colour.

Vibices

Vibices sometimes were seen, and the whole skin was mostly of a dusky hue. Their pulse was to the last degree weak, quick, unequal, and intermitting: their breathing laborious and interrupted by frequent sighs. Their taste seemed entirely gone, nor did they find fault with the most bitter draughts.

During the whole course of the disorder the thirst in most persons was not considerable, except in those whose inflammatory symptoms were more violent than ordinary, an increase of thirst also not unfrequently preceded amendment. The remissions in most patients were very conspicuous, in some the complaint assumed a double tertian form, the exacerbation of each day not answering in degree to the one immediately preceding, but to the one before; in these the alternate paroxysms were very slight; yet in other cases where it approached nearly to the quotidian, its usual type, still some difference was to be perceived; about the height
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however this disappeared, and the remissions also became less remarkable. Many had frequent bleedings at the nose, even from the beginning, without any relief. The warmth of the skin was never very great, yet the sweat impressed a disagreeable pungent sensation on the finger which cannot easily be described, but was not however that of heat. In a few, petechiæ of a dun or purple colour appeared even before they confined themselves to bed; these complained much of the head-ach and were in an odd raving kind of way, with a quick full pulse and thirst; if permitted to go on exposing themselves to the cold air they seemed to grow gradually better from the time the petechiæ were perceived; those however who were put into bed and sweated almost all died. Some at the first attack of the disease were seized with repeated faintings, but did not seem to be in greater danger afterwards than they whose symptoms proceeded more slowly.

It

It was extremely difficult to distinguish the exact time at which the disorder when left to itself began to decrease, its changes were so very imperceptible that I have known the attendants think a patient no better, when in reality the disease had taken a turn that with care placed him beyond the reach of danger. This usually happened about the eleventh or thirteenth day; the last also was the day in which those who died were most frequently carried off.

The disease here described shewed itself among the middle ranks of the people, whose fortune not exempting them from industry, they are exposed to many irregularities in their manner of life: who use much flesh in their diet, and whose prevailing foible is an indulgence in spirituous liquors. Among the poorer sort whose food is principally vegetables, the disorder during the summer and harvest proceeded to a much greater length, nor did it shew such symptoms of malignity; the un-
comfort-

comfortableness of their houses, and want of all heating medicines perhaps assisting to put a friendly stop to its increase: but in the winter and spring the case was otherwise, the disease making much greater and more rapid havock among these forlorn indigent people.

During the continuance of this, the country as to other disorders was very healthy; whatever feverish complaint intervened, whether erisipelas, rheumatism or any particular inflammation, constantly at first assuming a resemblance of the epidemic, so as to require great circumspection to distinguish them. To a person not conversant with epidemics this may seem extraordinary, and he might assert that the height of the fever and other symptoms laid down by authors will serve this purpose accurately enough. But it is to be remembered that the fever in the disease now described was variable; besides many epidemics seem to bring the fever and other symptoms incident to intercurrent

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O disorders

disorders to nearly their own standard stamping them all with their peculiar mark. After the first two or three days the characteristic symptoms appearing stronger relieved the practitioner from all further doubt and uneasiness, for although their treatment required considerable attention to the prevailing distemper, yet not being always exactly the same, until he in some way ascertained the case, his situation was far from agreeable, nothing distressing a generous man more than a fear of hurting that life or health which is with unlimited confidence entrusted to his care. It sometimes appeared in such cases not improbable that the morbid cause of the epidemic complaint fell upon those particular parts which had been formerly liable to attacks of other disorders, and that the patient was relieved by it from this fever. At least I have seen cases of rheumatic and erisipelatous persons who were seized with all the symptoms of this epidemic, which after continuing for some days went of suddenly

denly, on the person having a more copious eruption than ordinary of the erisipelas, or being seized with excruciating rheumatic pains in some of the parts where he formerly had been subject to them.

The following observations on the cure were drawn from cases, similar to those which perished when treated in any other manner. The merit of this treatment will appear more conspicuous when it is considered that a physician was never employed in the slighter cases, and but seldom until long mismanagement had brought on the last and most dangerous symptoms: then he was called in that the friends of the patient might deceive themselves with thinking they had done every thing in their power to save him: nevertheless its success was so great that the author in an extensive practice during the whole time of the disorder lost but two patients. One of whom, a debauchee continued in spite of all remonstrances to drink spirituous liquors until within an hour of his death,

thereby superadding such peripneumonic and other inflammatory symptoms to the original load of disorder, as no strength was capable of bearing. To the other the physician was only called the tenth day, at which time he was cold, had no perceivable pulse, and died next morning.

As to the cure, bleeding that first and grand auxiliary to the physician in treating inflammatory disorders seemed here to lose much of its influence. When performed in the very beginning, the pulse rather increased in quickness, but without that fulness which attends the performance of it on a person oppressed with much plethora; nor was the head-ach at all diminished. In this stage however it was often absolutely necessary on account of a greater degree of fever which attacked some persons. But even in them the quantity requisite to be taken away was small, and where that caution was attended to I knew it taken from many without hurt where scarcely any indication requiring

requiring it appeared. When any however were led by this to repeat the practice in the same patient, they never failed to injure him almost irreparably. If the third day was likewise suffered to elapse, especially when the person had profuse sweats, the drawing blood, although for the first time and from a young patient, became peculiarly hurtful, the pulse becoming amazingly quick, weak, and intermittent, the sweats cold, clammy, and more profuse, and the disease rushing to the concluding period with increased rapidity. The pulse luckily at this time never indicated bleeding, not even in the spring when the fizyness on the blood and manifest benefit received from the first operation seemed to warrant its repetition.

Common emetics such as hippocacuanha seemed hurtful; when given in the first stage or before bleeding they increased the head-ach, and raised a great disturbance over the whole body. Afterwards their use was more precarious, nor were they often

tried, as it did not appear safe to throw away any of the remaining strength upon a violent and at the best uncertain remedy. Where they proved purgative their effect was different, but this will come in with more propriety under another head. What was brought upward by them had seldom any thing remarkable in it: nor was there reason to suppose the stomach so much the primary and chief seat of the disorder as the intestines. In some few instances where that was suspected on account of greater nausea, violent sickness during the paroxysm, with a fuller intermission after it, greater foulness of the tongue, bitterness in the mouth, and quickness of pulse than could have been expected from the time of the disorder, their exhibition was useful in lightening the succeeding paroxysm, but scarcely ever extended farther. I believe indeed they were never prescribed by those who knew the effects of antimonials, unless some peculiarity of system forbade the use of the latter.

Sudorifics

Sudorifics were sometimes tried in conformity to the opinion of some most respectable authors, who have written on malignant fevers, but without success. In a slight case or two they appeared serviceable, but it must be remarked that these were only imagined to threaten the approach of the disorder. Warm vinegar or lemon whey were those mostly used on the occasion, volatile spirits rarely, and even antimonials when managed for this purpose lost all their good qualities. A sudorific never failed to procure copious sweats, but it depressed the patient very much, parched his tongue, increased the raving and melancholy towards the close, gave the petechiæ a deeper dye, and brought a bloody turbid appearance on the urine, with often a prodigious red light sediment falling toward the bottom of the vessel, but not entirely separating from the clearer part. A favourable prognostic having been drawn from this appearance, which was thought to accompany a crisis, it may not be amiss to observe that

it always portended the utmost danger, nor was ever seen except after immoderate sweats, the improper use of cordials, or blisters too soon applied. Our opinion concerning the event of a disorder should never be drawn from one symptom, and I have often remarked that in all fevers wherein the *primæ viæ* are principally concerned, I mean those termed nervous or malignant, the urine is not much to be depended upon.

The chief error however in the two first stages of the disorder arose from an improper use of blisters. The general use so prevalent in this country of blistering every person who was in the least delirious or complained much of head-ach could never be more destructively applied. The inflammation and pain caused by them was amazing, the low muttering delirium quickly changed into a violent phrensy, accompanied with profuse sweats, and almost bloody urine. Yet two appearances still maintained their credit with
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some practitioners. One was the vast discharge from the blistered part, which to them seemed a harbinger of safety, though in reality the forerunner of the most imminent danger. I have seen cases in other malignant fevers as well as this, where a blister on being applied only four hours has raised a greater inflammation and discharge than it would at a different time have done in twelve; all these however either died soon after, or were so near it as to deceive the expectations of every one by their recovery. Nor do I fail on seeing a larger discharge than usual from a blister, to pronounce the fever highly dangerous. The other support of blisters was their effect upon the pulse in making it full and tolerably regular, though it had been before weak and unequal. But this change was not of long duration; so soon as its operation was over, or the small remaining strength of nature exhausted, the pulse sunk again below the power of blisters or the highest cordials to raise. Cordials had
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the same bad effects with blisters, and when these were combined with warm air there cannot be conceived in nature a more miserable spectacle than was exhibited by the unhappy victims.

Here let me observe that in most fevers which have fallen within my notice, there is a certain time when we should not endeavour to raise the pulse, even although we deem it too low. This is after the first stage of the disorder, when having in vain tried antimonials or any other methods which commonly succeed in the same species, we find that in opposition to our attempts, it will run the course which the prevailing fevers usually do. In this case raising the pulse by cordials or blisters is putting nature upon a struggle before the time in which it can prove effectual; and I have often seen the worst consequences afterwards where few had reflexion enough to perceive the cause. About the time of a change in fevers we not only need all the strength of nature, but likewise that all her faculties should be
awake

awake to the action of blisters, cordials or any other medicines with which we may find it necessary to stimulate her. This however will never be the case if we anticipate the use of cordials; no medicines losing their effect so much by custom, nor blunting the powers of nature so efficaciously as to all others.

Having viewed the different methods unsuccessfully tried in this distemper, let us now turn to a more pleasing prospect. And here it may not be improper to remark, that some medicines may be very useful in a disorder which do not immediately produce any good effect; whilst others often in reality do harm, although for a time they seem to answer the intention of cure. It is only by an impartial consideration of the final event in patient's who have been treated by different ways that we can form a decisive opinion, which ought to be followed.

Acids in the first stages of the epidemic I am treating of, were among those medicines,

cines, the good effects of which were more perceivable on an exact comparifon of fuch as did, with fuch as did not ufe them. Indeed what great apparent advantage could be expected from thofe quenching coolers in a diforder accompanied with little thirft, heat of fkin or feverifhnefs of pulfe. Notwithftanding this, they were of great fervice in checking the progrefs of the diforder, for although when given in the largeft dofes, they were not of themfelves equal to the cure, yet they coincided fo much with the plan generally purfued, that no fmall part of the benefit feemed owing to them. Juice of lemons, vinegar, or elixir of vitriol were thofe generally ufed; the two former with bread, tea or water, made an agreeable drink; the latter was added to their common drink or medicines, fometimes to the quantity of half a drachm in the hour. By this it will be plain that they were not too fparingly dofed, a fault juftly cenfured by Tiffot, and that if the body could have been

been defended from the disease by any such medicines it would by them, but that was to come from another more powerful hand. As to these I must mention however that when China oranges could be procured, they seemed preferable to all others of this class, the stomach being able to bear a very large quantity of their fine light juice, I would therefore recommend them as well worthy of a trial in most feverish complaints.

Antimonials so managed as to prove purgative when used in the first stages, shewed the most salutary effects, either carrying off the disorder entirely, even after it had given manifest tokens of being completely formed, or at least rendering it so light as to have no alarming symptoms during its whole natural course. Tartar emetic divided into small doses with cream of tartar, or antimonial wine added to decoction of fenna and tamarinds was given every hour in this intention, until it nauseated the stomach, or began to purge,
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which latter effect it almost never failed having. The operation of all purgatives but more particularly antimonial was very unequal in this disorder, seeming more to depend on the quantity of putrid matter collected in the primæ viæ than on the dose given, or the known constitution of the patient. One third of a grain of tartar emetic taken every hour for four hours has been known in this disorder to procure twelve motions; and at another time of the disorder upwards of seven grains given in the same time, and to the same patient, neither vomited nor purged, and scarcely sweated. In general it operated most when first exhibited, and seemed to lose part of its effect on every repetition. The rougher purgatives were never given, as all purging beyond a motion or two had been condemned by most authors in putrid cases. It was however remarkable that when those mentioned above procured an immoderate evacuation, the patient so far from being weakened, found himself

himself lighter, easier, and his pulse rose considerably. It is not meant by this to defend strong purging in this fever, but only to point out the little necessity there was for flying to opiates to stop it as soon as it exceeded what from our preconceived opinion we might think sufficient. Whenever in this fever the purging very much exceeded any thing we could suppose effected by the medicines, we might reasonably conclude it owing to the larger quantity of putrid matter collected in the bowels, as I have always found it more offensive in its qualities at such times; and do we not by the premature use of opiates run a risque of confining in the body part of the very cause of the distemper? Though antimonials have been so highly praised in this disorder, and indeed in the two first stages of it no medicine deserved an equal character, yet James's powders seemed always to have rather a bad effect, perhaps partly from their being more liable to operate by sweat than any other preparation
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of that semimetal, and from the strict directions to keep warm during the use of them which are delivered with each packet.

As I have so often mentioned James's powders, I may be allowed to give one remark, concerning a complaint that they are seldom given at a proper time in fevers, whereas I believe great part of their reputation and success is owing to their being never used but towards the close. In the beginning of fevers tartar emetic is certainly a superior medicine, being much less apt to pass off by sweat: toward the middle no antimonial nor any medicine we yet know will prove successful: and after continuing for several days most fevers terminate by a sweat which I have hinted before to be the most common operation of these powders; besides at this time they often gain the reputation of performing a cure when nature in reality was the successful operator. Indeed I cannot avoid thinking that if we studied the prognostic part of medicine as accurately

accurately as the ancients, we should much more rarely meet with these supposed cases of extraordinary recoveries : about the time of a change most persons appear much worse, which gives the greatest alarm to their friends, and unluckily the physician is often not able to quiet this by forming a tolerable judgment of what is to happen, nay he sometimes loses his presence of mind as much as the attendants, pouring in large quantities of medicines to obviate a number of different symptoms which then appear. This method of prescribing to symptoms has been always the bane of physic, any extraordinary appearance no sooner shewing itself than many physicians seem to think they should overcome it, without considering the general tenor of the disease, which may require a different treatment.

After antimonials had been given to unload the stomach and intestines, it might seem useless to go on with their exhibition, yet I scarcely met with a case wherein it

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was not necessary to give the quantity of a grain or a grain and a half of tartar emetic every day, otherwise after a short respite procured by the preceding dose, the violence of the disorder returned, though in a varied form, there being fewer symptoms of any peccant cause in the bowels; and antimonials when repeated after such omission seeming to have no good effect.

Before I treat of the method of managing the third stage, it is necessary to observe that after the first, or as soon as the desipientia came on, no medicines whatsoever were often immediately able to remove the disorder; the only thing which could then be done was, by a proper management to bring the patient to the usual time of its decline, without any symptoms dangerous to himself or alarming to his friends. Although however this could mostly be performed, yet it must be acknowledged that, whether from the previous habit of body or something more particularly vitiated in the primæ
viæ

viæ in some of those who were managed in the best manner, the disease had notwithstanding a louring aspect about the time of its being at the height ; but even in these there were always some favourable symptoms which cast a faint light across the gloom. Two of the cases here referred to were young men who had frequently indulged themselves in drinking largely of wine and spirituous liquors, and a third had been liable for many months to a pain and weakness in his stomach.

One of the things which had great and immediate good effects at the height and worst time of the disorder was the application of cold air. During the first stages indeed the cool regimen was strictly enjoined, the curtains of the bed were undrawn, the quantity of bed-cloaths lessened, the drink never suffered to be in the least warmed, the linen changed as often as moistened with sweat, and as the patients often lay in small rooms not sufficiently airy, the door was not permitted

to be shut, neither was the chamber allowed to be heated by a fire, nor many persons remaining in it at the same time. But in the last and virulent period these methods seeming inadequate to the greatness of the complaint, a farther and unusual step was taken. The patient was directed to be lifted out of bed, and with only the covering of a great coat or wrapper not kept tight to his body, exposed to cold air for a considerable length of time, often until an universal shivering and chattering of the teeth gave sufficient tokens of its having taken effect. The person thus chilled was again laid into bed, and there being sometimes a strong inclination to sweat afterwards, every means was taken to prevent it. The first hint to this practice so daring in appearance was taken from accident. Many persons in this fever as well as in others were known, who either by strength or cunning eluding the diligence of their attendants had run naked into the fields, and given a fortunate turn
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to the most headlong malady. Some have even plunged into cold water with the like success: nor do the annals of physic, as far as I know, afford one well attested instance of the cold at such a time proving prejudicial. The strong desire which the unhappy sufferer has for coolness is an irresistible argument in its favour. Our feelings were given us both in health and sickness for the wisest purposes, and it may with truth be asserted that thousands have perished from being inattentive to their dictates, for one who implicitly submitted to their guidance. Even in the articles of meat and drink where the palate may sometimes be accused of deceiving us, it may justly be questioned whether any one ever suffered considerably in health, without being repeatedly admonished by very strong sensations of the necessity for altering his course of life. In this fever the reasons for exposing the patient to cold air were not always equally cogent; but wherever cordials had been used, where the delirium

was considerable, and the eyes inflamed or bloody, where the pulse was very quick though small, and the sweats profuse, it never once failed of producing the most salutary consequences; the patient frequently recovering some degree of sense before reconveyed to his bed, and the disorder taking a happy turn from the very circumstance hitherto avoided with much care. The taking a patient out of his bed in the midst of a most profuse sweat at the critical time in a fever may startle many, and indeed until experience had fully evinced how little good these sweats ever produced, and how great the necessity for checking them, it is scarcely to be supposed that the most hardy practitioner would have ventured on a method so far out of the common road. It often required no little medical intrepidity to withstand the outcries of nurse-keepers, and attendants, the fears of the relations, and the dread of the world's censure should the practice chance to fail even in a case before allowed

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ed to be desperate. Mankind no more than individuals like the person who endeavours to convince them of their errors, and though for a time a torrent of success may quench their prejudices, yet ever are they ready upon the smallest miscarriage to flame out anew. The physician however who practises to his own conscience, alike regardless of the undeserved censure or applause of the multitude, must in the end prove triumphant, or should he not, the pleasing remembrance of having performed his duty will be a more noble reward than in the power of wealth or royalty to bestow.

The great advantages attending exposure to cold air in the small-pox gave considerable encouragement to try it in this disorder: for although positive conclusions cannot be fairly drawn from one distemper to another, yet a similarity of the principal circumstances will always lead us to hope for a similar event from the same method being pursued in both, and we must

ever be contented with this reasoning from analogy, where we have not stronger lights to guide us. The time when patients were thus exposed to cold air I must again mention was always at the height of the fever. Whether it would have answered as well before that period I cannot determine, but am apt to think it would not. The patient's inclination for it was then greatest, and all the accidental cases of it which proved successful within my own knowledge were at that time, I therefore never ordered it at any other. A prudent physician could often manage matters so as scarcely to have it known that he had used so bold a method; a blister was to be dressed, the bed shifted, or some other thing to be done about the patient, by taking proper measures during which he might attain the desired end without its being perceived. I know not whether cloathing the person and carrying him into the open air would not frequently have been preferable to the manner here proposed,

posed, but as this last always proved sufficient in the fever before us, I was not induced to try the other. One circumstance not a little remarkable, was that some of those who were exposed to cold, were seized by an immediate cough from it, this I always found a certain sign of a speedy recovery. The same thing I have often noticed toward the close of other fevers, when I did not with certainty know the cause, and cannot recollect a single instance of the disorder afterwards terminating fatally.

The effects of a judicious exhibition of the bark were not less remarkable than those already recited from the admission of cold air, however extraordinary they may appear. The form in which it was always used was by boiling a large quantity of water on an ounce of the bark to a pint of strained decoction, to which two or three drachms of the elixir vitrioli were mostly added. Of this the patient took one, two, or even three ounces every hour,

hour, according as the urgency of the symptoms seemed to require. In a few instances where a great weakness of pulse arising from the tediousness of the distemper seemed to demand it, tincture of the bark was added to the decoction in place of the elixir vitrioli, but this was so rarely done as scarcely to deserve the place of an exception to the general treatment. Any tinctures indeed, or warm additions were found mostly improper, as they heated the patient too much, and limited the dose of the bark itself, upon which the principal reliance was placed. It must therefore be apparent how little confidence could be put in any alexipharmic or other tincture of the bark when given as the capital remedy. The bark in substance might perhaps have proved equally efficacious with the decoction. It was not tried in the beginning from an opinion that the powers of the stomach in its weakened state might not be sufficient to extract the virtues of the medicine. And although this reasoning

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ing should be fallacious, yet the method being strengthened by continual success, it would have been a crime of the deepest dye to change it, unless there were very strong motives to induce us to the alteration. The making wanton and often useless experiments is not the part of conscientious practitioners; they must be content with following a beaten track as long as they find it tend to the health of mankind; wherever success fails there experiment properly begins. The decoction had likewise an apparent advantage over the bark in substance which was its being more easily swallowed. This circumstance alone would have great weight in directing our choice, the persons to whom it was prescribed having lost all guidance of their rational faculties, whereby they might be made sensible of their danger, and of the urgent necessity for their obedience to the physician's dictates. Luckily for the patient along with his reason he mostly lost
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all distinction of tastes, so as to swallow the largest quantities of bitter draughts without complaint; had it been otherwise it is impossible to conceive but that many must have perished. I will not deny that neither water nor spirits seem to me to extract the whole virtues of the bark; each of them likewise appear to take up parts somewhat different from the other, and there are often cases wherein we want the qualities of the medicine extracted by the one or the other, and sometimes those the entire substance; and in a judicious choice of these consists the skill and accuracy of the prescriber.

The doses of the bark here recommended must appear extraordinary to many. Accustomed to see it prescribed only in much smaller quantities by eminent practitioners, the deviation from their rules may to them seem dangerous. The foundation for those fears of untoward consequences from large doses of the bark by which many are possessed shall not here be particularly

particularly examined ; let it for the present suffice to say, that no one bad consequence was ever perceived from it though given in this fever to the quantity of three ounces in twenty hours, or five in less than thirty, nor was it ever found to be nauseated by the stomach ; it may be observed that no two medicines could differ more in effect, than the doses here mentioned from the highest commonly ordered. Wherever indeed the disease had not arrived near the height, and no alarming symptoms required an immediate check, recourse was had to smaller doses, especially after the use of antimonial purgatives. But I cannot say that these had any perceivable good effect ; the delirium being always exasperated on their use, so that unless the quantity was greatly increased, the person seemed in imminent danger of perishing. The largest doses of the bark given at this time did not immediately stop the disorder, nor alleviate any of its symptoms ; on the contrary they appeared

appeared often aggravated by them; yet as none of these afterwards died, I must be allowed to conclude that they were serviceable, although the benefit was not manifest at first. The death or recovery of our patients should be our only criterion of a particular practice in fevers, the common rule of using an agreeable and speedy method of cure must be solely applied to ways equally safe, nor should we ever run the smallest hazard of life, on account of the distemper being either heightened or mitigated for a few days by any difference of treatment.

It often happened that, before advice was required from a physician, the disease had arisen to such a height, attended with so many mortal symptoms, and such extreme weakness of the patient, that no time was left for tediousness to trifle in, nor strength to bear antimonial evacuants. In this case the largest doses of the bark were immediately flown to, which never failed of purging considerably when the
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person had been costive and no previous motions procured, thereby in some measure obviating all bad consequences from the preceding inattention to so capital a point. It became sometimes requisite to stop this purging by the use of gentle opiates, not that it seemed to weaken the patient very much, but lest the effects of the medicine might entirely go off in that way: this however was done with the greatest caution, never indeed until the evacuation had run to a great length, and that the person appeared to be losing ground, none of the first symptoms of amendment shewing themselves. Four or five drops of thebaic tincture proved sufficient for this purpose, nor was it requisite to repeat them. One apparent reason for not checking the purging speedily was the matter evacuated by it being to the last degree putrid and offensive.

The first sign of recovery usually perceived after the exhibition of the bark was on the tongue, which became clean
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and red. The eyes likewise recovered their lustre, though sometimes a small degree of inflammation with a wild stare remained in them for a few days. The petechiæ lost their dun hue appearing much smaller, and of a highly florid colour, after which they soon disappeared. The quickness of the pulse abated, to the no small advantage of its strength, even in some cases assuming an inflammatory hardness; and indeed a change of all the symptoms from a low putrid, to an inflammatory cast was very frequent toward the close of this disorder when it ended favourably. The distemper had now a full remission, but this was oftentimes short, being succeeded by one sharp paroxysm, nay I have seen the paroxysms much worse for the space of twenty-four or even thirty-six hours after the bark had been given at this time. The urine, which in many a little before the height became transparent, did not as yet shew any sign of change, when it could be collected: at last however

ever it began to have a cloud, and then to break completely and let fall a sediment; but in this it was very variable, nor could much certainty be gathered from it. The delirium and insensibility as to their evacuations often continued some days after all other symptoms shewed the danger to be over.

As to the bark and exposure to cold air, it must be observed, that in some cases they were used jointly, in others separately. Often a physician did not see the patient until there seemingly was not time for the bark even in the large doses already mentioned to take effect, an exposure to cold air being much more speedy in its operation was then immediately tried. In some instances the bark alone produced the wished for change, yet in others after the patient had taken a very large quantity of it, there appeared a necessity for using some additional means to stop the career of the disease, which was only to be done by cold air. Their operations

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were not very dissimilar, both checking the profuse sweats, raising the pulse and spirits, and rendering the tongue and eyes clear; but as to the delirium, cold air diminished it instantaneously, whereas it ever increased on the first use of the bark; the former seemed to effect a cure without raising any inflammatory symptoms, which were almost always excited by the latter.

The drink which answered best during the whole course of the disorder was small beer, when it could be procured good; where that was not the case, or the patient desired a change, bread tea, or rough Irish cyder with a large proportion of water was advantageously given. The common drink used by feverish persons in this country is called two-milk-whey, which is made by boiling nearly equal quantities of sweet and sour milk together, the latter making a clear whey from the former similar to that made by vinegar or lemon juice, but more agreeable: this I always found improper in the present fever, as
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was every kind of milk or broth. Toward the close, when an abatement of the symptoms shewed the danger to be over, on account of the great weakness following so violent a disease, cordials of some kind were necessary to stimulate the inactive powers of nature. During the recovering state, claret was therefore added to their drink, a very small quantity of which proved often sufficient for the end proposed. Here I must remark, that although it is a common rule to begin with small quantities, and to increase them gradually, yet there are many exceptions to it. About the time of a change in this distemper, as also in many slow fevers which I have seen, the person required and found benefit from a much larger quantity than he could afterwards bear when the disorder was completely conquered. Thus I have been obliged to desist very speedily from giving wine in this fever as soon as the change was complete; and in miliary fevers consequent upon delivery, I have

known ladies who were obliged to drink a most extraordinary quantity, such as even two or three bottles in twenty four-hours, with safety confine themselves to almost as many glasses on the fever abating whilst the weakness still remained, and complain of being heated by that quantity, although the former large one had not more effect upon their stomach or head than if they had drank so much water. Similar to this we see that the gout, and some other disorders, at particular times have the power of rendering the stomach insensible to very great doses of cordials.

Peculiar care was necessary after a change, in the patients returning to the use of food; very inconsiderable errors in its quantity, although the kind seemed simple and proper enough, having brought on untoward symptoms and given the strongest apprehension of a relapse. They gradually increased from the smallest quantity as their strength returned, animal food being the last thing permitted. What made

made this caution more necessary, was that many when left to the guidance of their stomach took a much greater quantity than they could afterwards digest, whereby considerable feverishness was again raised. Most of them on being able to use exercise, recovered their appetite to a degree unknown even in health, nor did there appear the least occasion for administering purgatives after it, the constitution Anteus like rising with renewed vigour from its prostrate state. A few however were not entirely so fortunate, being troubled for a time with wandering pains, chiefly about the breast. These at first were ascribed to the bark, and thought to resemble that scorbutic rheumatism, which Sydenham mentions to have followed its use, but it appeared that at least as many of those who did not touch the smallest particle of that medicine were liable to the same complaints. These pains after lasting for a short time, always vanished of themselves, thereby giving the reputation of a

victory to any physical apparatus with which they were attacked.

In the latter end of the spring, 1772, inflammations of particular parts, especially the eyes were very common. These last were attended with feverishness at the first, which however speedily abated; an uneasy itching pain and redness seized the eye, and the eyelid was swelled and frequently excoriated by the heat and acrimony of the tears; light was intolerable to the sufferers, and many complained of a troublesome head-ach in the beginning of the disease. The other inflammations were by no means mortal, nor did this when at all properly managed prove of long continuance, a fortnight generally putting an end to the complaint. It did not bear the application of any thing astringent, on the contrary emollient poultices had the best effects, together with a frequent use of laxatives and nitre; a total abstinence from all animal food or heating drink was likewise

wise requisite. Bleeding at the beginning was sometimes beneficial, but afterwards was never necessary nor indeed did it then conduce to the cure; the intestines appearing the true outlet for the acrid matter which seemed to have fallen upon the eyes. Topical bleeding was most serviceable, and blisters were often applied with advantage, as was also camphor dissolved in spirit of wine, with the addition of water.

Astringents have been much praised for ophthalmias, on the supposition that an inflammation of this organ differs mostly from one in any other part of the body, and the many great cures which they have performed serve justly to sustain that reputation. If however we look narrowly into the matter we shall find that they have seldom been used with advantage in the beginning of the complaint, and that they were beneficial in the end should be ascribed to the change brought about by time in all inflammations that do not suppurate, rather than to any difference in the origi-

nal nature of the disease. Thus though they have gained great credit from succeeding where all other medicines have seemed to fail, yet they would not have been successful if used before those other despised remedies. It would be very advantageous could we by certain symptoms distinguish when these applications become proper, as the length of time which the disorder must continue previous to their being used with propriety, is so exceedingly various in different patients. Systematic authors it is true make this very plain upon paper, but I am afraid it is often so nice and complicated an affair as only to come within the reach of a physician's sagacity on the spot. In general we must administer the most powerful astringents to that disorder which has lasted for the greatest length of time. If we take the trouble of investigating all the most celebrated nostrums for these inflammations we shall always find them taken from the very strongest of the class; nor do I know
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any disease wherein quacks have so often shewn a superiority over the regular practitioner as this. In extremely obstinate cases I prefer a little burnt alum reduced to a fine powder with double refined sugar, and blown into the eye, to most medicines that I know.

Bilious complaints were very frequent during the following summer, and began about the middle of June, which was much earlier than I have commonly perceived: but having in a former chapter mentioned what I found remarkable in them, it shall not here be repeated.

It may be expected that I should in this place draw some conclusions from these observations; but I think that general doctrines have mostly been built upon too narrow and uncertain a foundation; besides, were they to be chiefly extracts from these remarks, they would lose all their propriety, nay often truth when separated from the other parts; neither do I chuse
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to sum up merely for the benefit of a cursory reader, what his own reflection would imprint much stronger on his mind, if he took the trouble of attentively considering the work. Had I however time or spirits to go on, and give a general view of fevers, from the foregoing observations together with all which I have read in Hippocrates, Sydenham, and the very few authors who seem to have had a true knowledge of them, I should not adopt any of the present methods, either of accounting for all feverish complaints from spasm or obstruction, or of dividing them into putrid and inflammatory, or arranging them from the symptoms; these methods not being taken from accurate observation, though they may appear very beautiful and simple, have yet one inconvenience, which is that they are not adapted to either nature or the practice. Sydenham seems to me the only author who has ever hinted at a proper plan for executing this, when he says “that as almost every constitution

stitution, besides the fevers which it produces, eminently favours some remarkable epidemic disease, as the plague, small-pox, dysentery, &c. he should think that these fevers ought to derive their names from the constitution, as this tends more peculiarly to produce some one of these remarkable distempers, at the time they appear, rather than from any alteration of the blood, or particular symptom; both which may equally accompany fevers of different kinds." That this method has never been sufficiently understood nor reduced to practice by any other writer cannot appear wonderful, when we find that even his translator Dr. Swan mistakes the whole design of Sydenham's writings on epidemics, or presumes to contradict his observations, as may be seen in his note at the conclusion of the second chapter page twelfth and elsewhere. This method it is true would be tedious and difficult, but he who attempts to render the practice of physic concise, and so easy as to require

quire little reflexion, will in the end find that he has deserted truth and usefulness, and in exchange got nothing but a system.

I have not given any formulæ for the medicines which I recommend, being sensible that this work will prove of little service to him who cannot adapt them to each remedy; besides I never made use of any set ones myself, as I think that physician who adopts such a method of prescribing, puts without any sufficient reason fetters upon his practice; a just idea of the patient's case, and a sufficient knowledge of drugs will always dictate the most proper form and method to exhibit them in. He who wishes to see extemporaneous prescription in all its present elegance and simplicity may consult a book called the London Practice of Physic, wherein he will also find the practical observations worthy of his attention, being written by a gentleman of an excellent understanding and benevolent heart.

CHAP. VI.

REMARKS ON NERVOUS AND MALIGNANT
FEVERS.

BEING led to suppose both by experience and the descriptions of the best authors, that nervous and putrid malignant or hospital fevers arise from something vitiated in the stomach and bowels, which seems too little attended to in their treatment, I shall here give the reasons in a concise manner that induced me to believe so, independent of my own practice. What I shall say is to be considered only as the heads of those thoughts which occurred to me in an extensive course of reading on fevers, that, had my health permitted,

permitted, I intended to have enlarged and made part of a more general and useful plan. Dr. Huxham on the nervous, and he together with Dr. Pringle on the putrid malignant or hospital fever, being the writers most read and in practice followed, if it shall appear that their methods of treating them are not well founded, the subject must be worthy our attention. I hope I shall not be supposed endeavouring in any of the following pages to injure the reputation of these eminent physicians: books that are seldom looked into and abound in faults deserve not a criticism, but when any error creeps into a justly admired performance, especially when that error intimately concerns the lives and health of mankind, it becomes the duty of every person who thinks he has discovered it, to make known his sentiments with ingenuous freedom.

The nervous fever generally attacks persons of a lax habit of body, who have
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been long confined or undergone great evacuations, fatigue, long dejection of spirits, salivations, too frequent purging, excessive venery, immoderate watchings or study; every one of which is known to weaken the stomach and digestion. It also seizes upon those who use cold, watery, slimy, mucilaginous things, as cucumbers and melons, unripe fruit, crude unwholesome food and vapid impure drinks.

The first symptoms are listlessness, uncertain chills and flushes of heat, weariness, heaviness, restlessness, dejection of spirits, and a load pain or giddiness of the head. A nausea and disrelish of every thing follows, without any considerable thirst, but frequently with inclination to vomit, though little but insipid phlegm is brought up, an oppression on the præcordia, anxiety and faintness, the pulse is weak, unequal, quick and intermitting, the fever remittent, the heat of various parts is uncertain, sometimes a sudden colour and glow

glow comes into the cheeks, while the tip of the nose and ears is cold, and the forehead at the same time in a cold dewy sweat. Nay it is very common, that a high colour and heat appear in the face, when the extremities are quite cold. The patients are very susceptible of the impressions of noise or light, their countenance is pale and sunk, their urine whey coloured, and their tongue is covered with a whitish mucus.

These are the symptoms of the first five or six days, greatest part of which so plainly point out indigestion, and some peccant matter in the primæ viæ, as the cause of the disorder, that it may seem almost unnecessary to bring in the authority of Hippocrates, as Doctor Glas has done in his excellent commentary on fevers, to prove that weariness, heaviness, shivering, giddiness, restlessness, anxiety, desipientia, oppression about the præcordia, coldness of the extremities, heaviness and pain of the head, pains of the breast and
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fides, and difficulty of breathing, dimness of the eyes, lowness of spirits, and pains about the loins or knees; or that of Galen, to prove that a weakness and unequality of pulse, are all symptoms of crude humours affecting the stomach and bowels. This matter will be sufficiently clear to any one who attends to the appearances previous to vomiting, when a person has either taken an emetic or some food or drink which disagrees with his stomach, and it seems not a little surprizing that any one could pass it by, who was endued with so much sagacity as Dr. Huxham, from whom the preceding description is entirely taken. And if to these we add from Dr. Gillchrist's account of the same disorder that it chiefly infects cold low damp places, not seizing one person who uses rich food and indulges in the use of wine, our opinion will receive additional strength.

I shall now consider the farther weight given to this opinion by the progress of

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the disorder. The giddiness, pain, or heaviness of the head become much greater with a constant tinnitus aurium, the load on the præcordia, anxiety and faintness grow much more urgent, coldish sweats come on, and frequently a delirium and subfultus tendinum. The tongue appears very dry and trembling, the nails pale and livid, and the pulse so exceeding weak and quick that the vibrations can scarcely be distinguished. There is sometimes a difficulty of swallowing, and singultus, very thin livid crude colliquative stools or profuse sweats, and sometimes a difficulty of breathing attended with a sighing or sobbing; an insensibility and stupor comes on with great deafness, and before death in some cases a profound coma; in others, the stools, urine, and tears, run off involuntarily, and vast tremblings and twitchings of the nerves are preludes to death by a general convulsion. There are remissions or intermissions during this whole disorder, and vast dejection of spirits. A
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gentle diarrhæa even in this stage often carries it off; and nausea sickness at stomach, colics, and delirium are the common effects of potent astringents prematurely administered to stop this even when very profuse. A moisture of the tongue and a copious spitting is always a very good sign, and a warm moisture of the skin is generally salutary, but profuse sweats never so. Does not the purging which is a never failing attendant on the unhappy close of this disorder strongly point out the cause, which has hitherto lain undisturbed in the intestines? Agreeable to this Sydenham observed in an epidemic fever, that whenever a vomit had been omitted in the beginning, a dangerous lax never failed to come on before the close. It cannot be expected that all the symptoms in a disease should be satisfactorily accounted for upon any one plan; when it has lasted for a great length of time the original cause has brought on such changes in particular parts, that these

effects give rise to new consequences, which may even in their turn also operate as causes, so that the appearances cannot readily be traced to their original. Thus the bile being vitiated and thrown into the stomach may excite a violent vomiting which by rupturing a vessel in the brain may produce a number of symptoms very different from the common effects of that complaint.

No one can read this description of the last stage of a nervous fever without reflecting upon the hospital or putrid malignant fever, which in every circumstance it so exactly resembles that I must own myself unable to make the distinction. Dr. Huxham has been at great pains in this point, yet I am afraid it will nevertheless be difficult to all those who cannot readily understand, that "Lentor and vapidity of the lymphatic and nervous juices, which stagnating corrupt into a putrid corrosive ichor," and which he assigns as the cause of nervous fevers; and "those
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contagious putrid miasmata, that not only dissolve the blood in some parts of the body, but make it run into concretions in others, and likewise primarily affect the animal spirits, and cause considerable obstructions in the brain," which together with the exalted salts and sulphurs of the blood, bring on putrid malignant fevers. To the person who allows his conceptions to assume the authority of matters of fact this may all seem very clear, and I am only sorry that so good a physician as Dr. Huxham should often avowedly bring in his conceptions as reasoning, at a time when with many little more is studied than ideal hypotheses; but I hope the practice of physic depends upon a much surer ground, than what this or that man does or can conceive to be the case.

What makes this distinction of Huxham's more embarrassing is, that the doctor himself when treating of intermitting fevers, says that in the autumnal season by improper evacuations as bleeding and purg-

ing, an unwholesome gross glutinous diet, vapid rosy drinks as stagnant water, foul beer, and the like, they were apt to degenerate into malignant putrid, or slow nervous fevers. This seems not very consistent with the distinguishing causes that in his sixth chapter he lays down of these two fevers, where he asserts that "these two different kinds of fevers may be artificially produced, if he may so speak, by two very different kinds of diet, regimen, &c. and is too often actually effected: the hot, acrid, saline, volatile and spicy food and medicines, very hot air, &c. will produce a putrid malignant: on the contrary cold watery slimy mucilaginous things, as cucumbers, melons, crude trashy fruit, vapid liquors, damp cold air, &c. bring on slow nervous fevers:" but this perhaps is one of those not unfrequent cases wherein the observation of an honest man faithfully related is at war with his theory. On the strictest scrutiny I can find no difference between these two fevers as described

ed by him except in degree, the one being a little more rapid than the other, and that he does not mention petechiæ in the nervous fever ; whether these are sufficient for an important distinction between them I leave others to judge.

I was more anxious in this enquiry from having observed the doctor's assertion, that a want of this distinction had been productive of great errors in practice ; however upon reading over his separate chapter on each disease, I became much easier from finding that the practice in both was so similar, or rather so exactly the same, that I imagined there was not much danger to be apprehended as to the patient's life, even though one disorder should be mistaken for the other. Thus we find in both the principal part of the cure is said to depend upon gently cordial diaphoretics, with subacid diluting drinks : camphor, saffron, elixir paregoricum, theriaca andromachi, gentle pukes or laxatives when the stomach is oppressed, the bark or its alexipharmic

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tincture, blisters when the fever is low and red wine with acids and saline draughts are the chief remedies praised in both. Volatile alcalious salts or spirits, heating medicines, violent vomits, drastic purgatives, and strong opiates are on the other hand found highly improper. It is true bleeding is recommended when the fever runs high in the malignant one; and vomits and purgatives are not much relied upon in the nervous, the stomach as he thinks seldom shewing much sign of foulness. But these and any other more trifling differences of treatment will appear adapting the general method to different circumstances of the same disease, rather than to contrary indications in opposite ones. I would not by this be understood to mean that there is no difference in reality between a low nervous fever as it is called, and a putrid malignant one; I am well aware that there is, but am afraid that in the last stage of the nervous one as described by Dr. Huxham a change is brought about by his treatment of it that he little suspects,

suspects, which is its degenerating into a truly putrid malignant fever in nothing distinguishable from the other described under that appellation.

The principal cause of a putrid malignant or hospital fever, is a number of persons being crowded together in foul confined places, especially in hot weather: it arises when dysenteries, mortifications, or other putrid diseases prevail; and any person taken ill of a putrid disorder, such as the small-pox, dysentery, or the like, if confined in a small and close apartment may fall into this fever. Preceding distempers or salivations dispose to it. It is infectious chiefly to those who are constantly in the bad air, such as the sick in hospitals and their nurses, and prisoners in jails: all others either escape it, or the symptoms come on so slowly as to leave time for prevention. These are the causes of this distemper laid down by Doctor Pringle, let us now pass onward to the symptoms

symptoms as given by that excellent writer.

The first are small interchanges of heat and cold, a trembling of the hands, sometimes a sense of numbness in the arms, weakness of the limbs, loss of appetite, and at night the body is hot and the sleep interrupted. With these there is some pain or confusion in the head, the pulse is a little quicker than natural, and the tongue white but the drought inconsiderable. In this state the distemper is not easily distinguished, except by the tremor of the hands, the previous causes, and the patients not being relieved by bleeding, yet sometimes a vomit, at others a change of air or a sweat, has been said to have cured it completely.

When the fever advances, the symptoms already mentioned are in a higher degree, attended with great lassitude, weakness, nausea, pains in the back, a more constant pain and confusion in the head, and an uncommon dejection of spirits, the pulse
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being quick and variable both as to strength and fullness. The fever is remittent, the urine sometimes flame coloured, oftner pale, but it varies from day to day in colour as well as crudity. When the sick lie warm the body is generally costive, but when they lie cold a diarrhæa is a common symptom, but is not critical; neither are sweats whether natural or artificial useful at this period. Some are never delirious, but all are under a stupor or confusion, the skin is generally dry and parched, and its heat on first touching seems inconsiderable, but upon feeling the pulse for some time there appears an uncommon ardor leaving an unpleasant sensation on the fingers. They rarely sleep, and have more of a thoughtful and dejected look than a feverish one. A tremor of the hands is more common than a subsultus, which when it occurs is less than in many other fevers. As the pulse sinks the delirium, tremor, and also dejection of spirits increase. The patient sometimes
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grows dull of hearing, and at last becomes almost deaf. The voice is commonly slow and low. Vomiting and complaints of a load and sickness at stomach are usual symptoms; flying pains or pleuritic stitches also sometimes appear, and a petechial efflorescence is very frequent.

In the last stage the tongue is mostly dry, hard, and black with deep chaps, but sometimes soft and moist to the end, with a mixture of a greenish or yellow colour; the breath is offensive, and a black fur-ring gathers about the roots of the teeth, the sweats are usually foetid. In some there are purple streaks and blotches, a subfultus tendinum, and in the worst cases a flux appears, the stools are then involuntary colliquative ichorous or bloody and of a cadaverous smell the extremities grow cold, and the pulse is hardly to be felt.

As to the exit of this disorder a gentle moisture diffused all over the whole body, or bilious stools succeeded by a diaphoresis have

have the best consequences. When it terminates fatally there is sometimes an abscess of the brain, the intestines however are more particularly subject to mortify, few dying without cadaverous and involuntary stools.

I shall not canvass the whole of this long description to shew the probability of the primary seat of this distemper being in the primæ viæ, and I hope it would be unnecessary to any one who does not delight in hypotheses and attentively considers what has been said on the nervous fever, and those symptoms which usually shew the stomach and bowels to be affected. But I shall go on to examine what other remarks favour this doctrine in the same author. In one part he tells us that when the hospitals are filled with dysenteries, some of the nurses will be infected with the flux only, and others with this malignant fever. The cholera, bilious fever, and dysentery appear in the same season with this fever, the last particularly seems

seems to be a constant attendant on it. The bilious or remitting and intermitting fevers of low and wet countries when at the worst may be considered as species of the malignant or pestilential fevers, since they have been seen with all the virulent symptoms peculiar to that class of diseases. Putrid fevers rage most during the autumn in flat marshy countries, where the water in common use is corrupted. The gentry whose victuals are good, houses dry, and who can afford to drink a just quantity of wine are least liable to these diseases. The remitting or bilious fever by foul confined rooms, or where bleeding and evacuations of the primæ viæ were omitted degenerated into this fever. Malignant fevers and fluxes are incident to all marshy countries after hot seasons; to populous cities low and ill aired, unprovided with common sewers, where the streets are narrow and foul, or the houses dirty; where fresh water is scarce; where jails or hospitals are crowded, and not ventilated and kept clean; when

when in sickly times the burials are within the towns, and the bodies not deep laid; when slaughter houses are within the walls, or when dead animals are left to rot in the kennels; when there is any large body of stagnating corrupted water nigh; when flesh meats make the greatest part of the diet, without a proper mixture of bread, greens, wine or other fermented liquors; when the grain is old and mouldy, or has been damaged by a wet season; or when the fibres are relaxed by immoderate warm bathing. Of such a number of causes it must be remarked that every one of them may be shewn to affect the stomach, besides the doctor himself allows that all animal food soon taints in a close hot and moist air; and can any nourishment be devised, which will entirely withstand such powerful causes of putrefaction as those above mentioned, even before it is received into the stomach. Meats long salted becoming putrid, occasion this fever. Of those who were exposed to the
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infection of the Old Bailey, some escaped without this fever by a looseness coming on which was easily cured; those who died seem to have been treated with blisters and cordials to raise the pulse---Pestilential fevers and dysenteries have abated in Europe since our improvement in cleanliness and the more general use of antiseptics in diet. A vomit is an excellent medicine in preventing this disorder. A looseness in the decline of the fever may be considered as critical. Some of the viscera always appeared inflamed and mortified in the numerous dissections of those who died of the last plague at Marseilles.

The whole of this account is extracted from Doctor Pringle's Observations lest if the authority of other writers was called in, it might be thought that the disorders spoken of were different; besides any evidence drawn from the opposite party should in physic as well as law have greater weight. To this let us add from Dr. Huxham who has written
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an account of the same fever, that, sometimes a great heat load and pain affect the pit of the stomach, with perpetual vomiting of porrhaceous, or black choler, and a most troublesome singultus; and the matter discharged is frequently of a very nauseous smell. All kinds of drink seem bitter and mawkish. Near the state there are frequently severe gripes, and the belly sometimes continues hard swoln and tense after profuse stools. There are also dark coloured aphthæ, or exceedingly white and thick like lard; they are soon succeeded by a difficulty of swallowing, pain and ulceration of the fauces, œsophagus, &c. Sometimes there are borborygmi, and nidorse or foetid eructations; too great costiveness and tumid abdomen. The stomach, duodenum, gall-bladder, and biliary ducts are always found full of black or green bile in those that die of pestilential diseases. An amazing change for the better immediately succeeds a fit of vomiting and a stool or two; where an inexpressible anxie-

ty, load on the præcordia, perpetual sickness, eructation and singultus had preceded. Commonly about the state in this fever, vomiting, loose stools, a profuse diarrhæa, or a dysentery come on.

From reviewing the whole description with care, and comparing it likewise to what has been already said on the nervous fever, it seems not unnatural to conclude that the cause of the disorder is seated in the stomach and intestines. It is true every circumstance may not tend to prove this, yet when taken altogether they form such a weight of evidence as cannot readily be overthrown. What the cause is in either this or the nervous fever I will not take upon me to determine; I am afraid that we know too little of digestion to discover by the sensible qualities of the contents of our stomach, whether they are in a proper condition for the purposes of the body or not; and besides what is evacuated by vomiting, will often betray no marks of degeneracy although we are well assured

ed that some part of it was faulty. Thus in Sydenham's depuratory fever nothing peccant could be discovered in the matter brought up by an emetic, although a number of bad symptoms were always relieved by it: and I would defy the best naturalist or chemist to tell, by their external senses or any experiments, what has been the cause of vomiting in a person who has swallowed an ounce of antimonial wine, unless the patient's having taken it is revealed to him.

In reasoning on nature whenever we see one thing follow another as often as they come under the cognizance of our senses, we conclude them cause and effect, and at particular times when we see the same effect, although the cause is not manifest we still think it exists and that the other is the consequence of it; nor do I know any other way there is of proving, that it is the sun which enlightens us at noon-day, when the face of heaven is covered with clouds. Let us then apply this to

the present case. An emetic, any thing considerably putrid, bilious, or acrid, in short a vast variety of substances which we know nothing about but by their effect, on being received into the stomach bring on great weakness, dejection of spirits, coldness of the skin and extremities, quickness, inequality and weakness of pulse, coldness with sweat upon the face, confusion or giddiness of the head, oppression and nausea at the stomach, which are to be removed only by the offending cause being evacuated. These are the leading symptoms in nervous and malignant fevers, shall we not then affirm that the cause is situated in the stomach and bowels? Does it not from hence appear pretty evident that those who talk so much about removing the spasm on the surface, only aim at taking away an effect, which would disappear of itself were the cause destroyed? Indeed the best practitioners among them constantly use hippocacuanha or antimonials in fevers, which they dignify with the name of

relaxants, but notwithstanding all that has been said about small nauseating doses of antimony, I must aver that in practice I have almost never seen them cure a fever without proving emetic or laxative, or if it were toward the close producing a sweat; others perhaps may have been more fortunate. I am afraid besides that this theory has given too much encouragement to the hot regimen, and taken off the attention of physicians from the state of the *primæ viæ*: indeed whether we proceed on the supposition of a contraction in the vessels of the skin, or of putrid miasmata received into the blood, what so ready and obvious a method of resolving the one or expelling the other as by a sweat, which all their cautions drawn from the practice will never be able totally to eradicate from the minds of young physicians. I must here observe that the subject of this chapter is of much more consequence than may at first appear, few fevers being found in large cities that do not partake of some

degree of malignancy. We cannot therefore be too exact in scrutinising their cause, and the different methods of practice proposed in them.

In consequence of this opinion respecting the seat of these disorders, a few queries concerning their treatment may not be unnecessary here. Will not all the indications of cure laid down by modern authors, of expelling the morbid effluvia or putrid miasmata from the blood, resolving the spasm on the surface, or keeping up a constant diaphoresis, fall to the ground when we shall know that the morbid matter lies only in the *primæ viæ*?

Will not this knowledge furnish us with much better arguments against the hot regimen than all those drawn from present or former theories? Thus though Doctor Pringle and Huxham inveigh against it, yet as they agree in placing the principal part of the cure in keeping up a moderate diaphoresis; others will wish to go a little farther

farther, and expel more speedily by a sweat, the cause supposed to be placed in the blood-vessels. Besides the term *moderate* is a very indefinite one, the explanation lying in the breast of practitioners, it will be understood by each very differently.

Shall we not entirely get rid of a perplexity which seems to have embarrassed even so excellent a practitioner as Doctor Pringle himself, when he tells us how nice the principles are that regard the cure, and that neither a hot nor cool regimen will always answer, having observed that a delirium would arise from two opposite errors; one from large and repeated bleedings, and the other from wine and the warm cordial medicines given too early? It has been singularly unfortunate for the practice of medicine in these fevers, that writers have thought bleeding and a cool regimen almost inseparable, and from finding the former prejudicial they flew directly to sudorifics; others from finding these

hurtful flew back again to bleeding; all equally in the dark, as it must be apparent that neither the one nor the other was proper. Bleeding and sudorifics in these fevers had their origin from a supposition of the disorder being in the blood-vessels, and must equally fall on that opinion being exploded. Bleeding may be sometimes necessary to obviate an urgent symptom, but can never form an object in the primary indications of cure, notwithstanding what Dr. Huxham has said to the contrary.

Will it not be apparent that even a moderately warm regimen is highly noxious, inasmuch as it prevents the stomach and bowels from unloading themselves, as they would do was the patient kept as cool or rather cooler than in health; every day's experience convincing us that costiveness is an attendant upon a person lying constantly in a warm bed?

Will it not likewise be plain that blisters and sinapisms so much relied upon by
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most practitioners are generally no better than so many poisons in these fevers? This perhaps will be more apparent to any one who considers what has been said of the symptoms brought on by them in the former part of this work. True it is, many who have been blistered recover under very deplorable circumstances; so will they likewise after a hot sweating regimen, there being patients whom the physician cannot kill. But I am afraid whoever weighs the matter exactly will find that the danger has been almost entirely created by blisters and other improper things, which nature by her innate powers successfully struggling with, removed, whilst blisters have received credit where they deserved the highest infamy. That blisters may sometimes do good in the end of those disorders I do not deny, my opinion however on this head is sufficiently shewn in the fourth and fifth chapters.

Will not the first indication in these fevers be to evacuate this cause in the readiest manner

manner, that is by vomits or purgatives ? There must certainly be great variations in the use of these according to the strength of the patient, time, and natural progress of the disease, nature of the prevailing epidemic, &c. but it will be no small point gained if we can establish their being the chief things indicated, and so plainly as not to require the support of hypothetical theory. Huxham indeed with the greatest judgment and candor points out a number of circumstances which require their use, in the beginning of putrid fevers, and gives them often the justest commendation ; nevertheless he is still too much wedded to the use of diaphoretics, upon which he places his chief confidence. This I am convinced has misled many who direct their practice rather to the name of a disorder than the circumstances attending it, to prescribe them much sooner than even Huxham would have allowed ; neither is it very unnatural for any physician to be most attentive to what he supposes of the
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greatest moment, expelling morbid effluvia from the blood, and to pass over slightly matters of only secondary consideration, the state of the stomach and intestines. Lest it may seem to the inattentive reader that I am here finding fault with Dr. Huxham unnecessarily, and that the only difference between our methods of cure is, purgatives being ordered by him to obviate a symptom, whereas I prescribe them to remove the cause, I must remark that the general indications of cure are more important than may appear at first sight, as I am convinced that in such epidemics as plainly have this origin in the stomach and bowels, we meet numberless patients in whom few of the symptoms occur mentioned by modern authors to demonstrate that cause, although by it our treatment must entirely be directed. It is needless to mention that in the nervous fever the doctor scarcely allows of evacuations, though if the account given of their cause in the former part of this chapter be just, it is plain they
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are principally indicated. To confirm us in this we may see their success in such cases related in the chapter preceding the last; where we shall likewise meet with the most proper method of giving them. As to Doctor Pringle's practice in the putrid or hospital fever it is nearly the same with Doctor Huxham's only that he does not mention purgatives, and forbids the use of vomits in the advanced state, from having seen the disease take a worse turn when he had ordered them; and even in the beginning he thinks they should be used with caution. Yet we find that in autumn 1757 when he first bled, then purged, and afterwards gave twice a day a grain of emetic tartar to those who were not in the low state, but complained much of head-ach, costiveness, and disorder at their stomach; all those who were treated in this manner recovered. It seems not a little extraordinary that after this evidence of their usefulness, one or two instances of the disorder becoming only somewhat worse after

after them, for it does not appear that the patients died, should deter him from giving them a farther trial ; especially as in his extensive practice he could scarcely miss opportunities of perceiving a disorder seem worse after the bark or other medicines which have notwithstanding performed a cure. But he has a salvo for not bringing this practice into common use in putrid fevers, as he tells us the cases in which he tried it were compounded of the bilious and jail kind ; for when those men upon being seized with the common fever of the season were confined to the holds of the crowded ships, their disorder soon put on a malignant form. In order however to the better understanding of this matter, let us turn back to his account of the causes of malignant fevers ; there we will find no mention made of this combination, though he tells us that the sick in hospitals are chiefly liable to them, and that when even a single person is taken ill of any putrid disease (as the small-pox, dysentery,

sentry, or the like) and lies in a small and close apartment, or keeps his tent too close he may fall into this malignant fever, and from the whole section we may learn that it is often not so much an original disease, as the offspring of foul corrupted air acting upon a person already under the influence of some other feverish distemper : besides no such distinction is preserved or even mentioned in any other part of the cure. The reason why it was introduced in this passage cannot but be obvious, as it was impossible on the Doctor's principles of a septic ferment corrupting the whole mass of blood, to account for this extraordinary benefit from antimonials in a malignant fever. A complication in acute disorders I have not often seen, and imagine their cause is always of too overbearing a kind to permit the operation of weaker ones ; the thought has perhaps taken its rise among those persons who believe they ought to account for every appearance in a disease, and so soon as they are briskly pushed

pushed with any doubts, make this word a refuge for their feeble understandings. Let us however content ourselves with so striking a fact, leaving theoretical reasoning upon it to those whom it may concern. These remarks are submitted to Doctor Pringle's candor with that deference so justly due to him from the medical world; his Treatise on the Diseases of the Army being one of those few books wherein usefulness is chiefly attended to, and the descriptions of diseases are not warped to support preconceived opinions; had I not used freedom in making them I should have done justice neither to the Doctor nor the subject. I am sensible that the twenty-second and twenty-fourth aphorisms of Hippocrates's first section may be quoted against this practice of purging, which tell us that we are not to purge in the beginning of acute disorders, unless the humours are turgid. This turgescence of the humours has been variously explained by different writers, but I think the only way of coming

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ing at its true meaning is to examine that author's works and discover when he directed purgatives, and I believe we will find that the marks laid down by him very nearly coincide with the symptoms of these fevers. In this view his saying that purgatives are seldom useful in the beginning of acute disorders, can mean no more than that he seldom saw these marks of the stomach being disordered in his country; that they occur more frequently here may be owing to the difference of climate. Besides allowance must be made for the difference of his purgatives from ours, which are always much milder in their operation, and his being totally unacquainted with antimonials, those unparalleled medicines in fevers.

As the next indication of preventing this cause being regenerated, is of equal importance, may we question whether the bark is not recommended in too small quantities both by Doctor Pringle and Doctor Huxham to answer this intention,
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for which it is or should be prescribed. That the bark is very powerful in these fevers and answers both the first and second indications I well know; nay I solemnly declare that I never saw one case of a nervous, putrid, or malignant fever, where the person could be brought to take that medicine in sufficient quantity, which turned out unfortunately. As to the quantity however I must remark that I never relied upon less than six or seven ounces in a dangerous case, given in little more than two days, but sometimes three ounces were sufficient. I must likewise add that I never saw the highest dose in these fevers disagree with the stomach at the time, nor do any hurt afterwards, and that if the patient could be brought to take the first quantities, he always persisted until he took enough, as I made it a rule to give it speedily as possible, their nauseating the medicine often arising from the great length of time they were teased with it. How ineffectual Doctor Pringle's highest

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dose of two drachms twenty-four grains in twenty hours, or Doctor Huxham's of two drachms in the same time were, might be seen even from the mortality of the disorder. I must here again beseech practitioners not to be deterred from persisting in the use of this medicine, on account of the patients seeming worse at first after taking it; it is a circumstance I have often met with, and learned to disregard from finding that the patients never died. We might with as good reason avoid giving an emetic, in a case where we thought it indicated, because it will make the person sick and seemingly worse before he vomits; the apparent change for the worse after the bark it is true lasts much longer, but this shall never be an exception with me against it, until I find that the patients do not recover. In this second intention of correcting or preventing putrescence, I must strongly recommend the China orange, as preferable to all the mineral or other vegetable acids; perhaps the bitter of the peel,

peel, some of which must necessarily be swallowed, adds considerably to its virtues.

May I be allowed after what has been said of exposure to cold air at the height of a malignant fever in the fifth chapter, here again to enforce its use? When that period arrives we generally want to give high cordials to the sunk patient, and sure I am that if raising the pulse, strength, and spirits, be the effect we desire from a cordial, no one can pretend to equal power with cold air. I will not lose time by speaking theoretically on the point, being sensible the supporting it in that way would contribute little to its credit with really judicious people, but will remark that it was practised by the antients as we may find in Celsus; whether it fell into disrepute from any demerit of its own or not would lead into too long a detail. I am also convinced that a diligent enquirer might collect many hundred cases of its proving a speedy and certain cure in the most dan-

gerous fevers, as I have scarcely spoken to a single person of moderate reflection in these kingdoms who could not recollect some instance of it that had fallen within his knowledge, nor have I yet heard of a single one wherein it proved hurtful.

Shall we then still go on to follow a practice under which so many perish every day, or shall we despising the *ne plus ultra* of theory seek for new methods to procure relief? No person detests more than myself the making experiments at the risk of the patient's life; but when I see a patient who must inevitably die in any of the common ways of practice, I think myself bound in duty to change the method even to some conjectural one if no better offers. In such cases I consider myself called in only to save a life, it not being material to the patient or his friends whether he goes out of the world according to art or otherwise. When I read any of our modern treatises on the plague, and compare with them the mortality that prevailed notwithstanding

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standing all their boasted remedies, I cannot avoid considering them as so many beacons hung out to prevent my pursuing the same course, should I ever be so unfortunate as to meet with it; and I think that the same reasoning may be in some measure applied to nervous and putrid fevers. It may be alledged however by some that we cannot foretel whether a person will die in an acute disorder or not when treated in the common way. Such I would advise to study nature and diseases better, and not be led away by the most exceptionable aphorism in all the writings of Hippocrates, that a presage in acute disorders is always doubtful. That there is no disorder incurable but old age, I firmly believe, could we find the true method of treatment, and think this plan infinitely the most proper to proceed upon for the credit of our profession and the true benefit of mankind. As to chronic disorders I fear we are not yet acquainted with medicines enough to accomplish this

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design, but in fevers I am assured those which we know at present are perfectly sufficient, and shall ever fear that a physician was in fault if a person dies to whom he has been called whilst any degree of strength remained, and the patient could be obedient to his directions.

The preceding passage, in the first edition of this work, having been much censured, because not sufficiently understood, I shall here endeavour to explain it. Yet, although I desire to vindicate the spirit and intention of the paragraph, I must acknowledge, that the words would have been more expressive of my meaning and less exceptionable, had I said, I should ever fear that the practice had been erroneous if a person who was obedient to directions died of a fever. This may sometimes be the case without the physician's being in fault, perseverance only in the unsuccessful mode of practice being the true object of the above
censure.

censure. As however the justness of the sentiment, even thus explained, will be denied by many who will not submit to change their method of practice in compliance with it, and as I consider it of no less consequence than the saving or destroying the lives of myriads every year, I hope I may be allowed a few words in its defence.

Many among us, I am afraid, place a more implicit confidence in theory than we imagine or are willing to own. From hence it happens that we think our knowledge in the art arrived at such maturity as scarcely to admit of increase, although it might, with greater truth, be said to be in its infancy. This opinion has been uniformly opposed to every improvement in the science. I consider it as the poison of medicine, and cannot avoid lamenting that it seems to have infected those who are otherwise an ornament to the art. It is the basis of every system, and the vain sufficiency of a student, which too often

prevents him through life from acquiring useful knowledge. Even old practitioners are more deeply tinged with it than is commonly supposed, for although they are ever ready in general terms to allow the imperfection of the art, yet when we come to view their practice in disorders, the most commonly fatal, we find them often steadily pursuing the same method which had almost constantly proved unsuccessful before. That I may not be thought to misrepresent the practice, allow me to bring it to the test of fact. Many gentlemen of the medical faculty are seized every year in London with fevers. These are mostly in the prime of life, and have the best attendance from the beginning of the complaint; yet I believe I shall not exaggerate in saying that one third of them always die. May it not then be said that to the obstinacy with which the present practice has been pursued we owe the loss of an Aikenhead, a Grieve, a Hulse, a Hewson, with many others whom I could mention.

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mention. I know it will be insinuated that the same proportion of deaths will not be found in any other profession, and various theoretical reasons will be given as proofs. But from every thing which can be collected, the only inference, perhaps, is that in proportion as any set of men are less attended to in fevers fewer of them die, which must ever be the case where the practice is fundamentally erroneous.

To view the matter in a stronger light. A physician after having investigated the disorder of a patient with great care and apparent accuracy, and prescribed such medicines as seem to satisfy the indications of cure formed thus with a humane solicitude for his life, thinks that although he dies, nothing more could have been done, and that his case was beyond the reach of medicine. This is the opinion which most practitioners adopt as to particular cases, who indeed seem willing to give it up as to general conclusions.

But it should ever be remembered that we can never acquire a knowledge of generals, except by a careful attention to particulars, and that if we are habituated to think ourselves right in each individual case, it is impossible for us to find out our error as to general maxims.

It is likewise said that if our method of practice be improper it will be pointed out to us by numerous instances of want of success. If this has any meaning it is, that after killing a number of our patients, we shall be obliged, perhaps by the clamour of the world, to do, what should have been done at first, to reflect upon our practice, and find where it was erroneous.

It may be alledged, that with the best practice we must ever lose many patients to whom we were called in the beginning of the disorder, and that endeavours to find out a new mode will sacrifice the lives of more than would otherwise be lost by pursuing the old method. It must be

remarked that the former assertion is only begging a question not much to the honor or real advantage of physick; and the latter must ever soon be rectified on this plan by the unsuccessfulness of each particular trial, since, if it does not succeed it will not be pursued farther. Besides, how dangerous a supposition may this be, if, as has often been the case, the practice which it supports be totally wrong. That neither of these assertions are so founded in truth as is commonly supposed may be clearly proved by the writings of Sydenham, a physician as far above Hippocrates as the cure of a disease is preferable to the most accurate observation of its symptoms and changes. He is almost the only one who has had penetration enough to see, and resolution to rid himself of the shackles of hypothesis. Though often seemingly clogged with them, yet the moment he found success desert his theoretical opinions, he shook them off as a troublesome incumbrance.

He at least adopted this plan, that whenever a physician lost a patient in a fever he should blame himself, and concluding his practice to be erroneous, try some other method with the next that occurred. Who can read without the warmest love, and veneration for the sympathizing heart of the man, his anxious reflexions when in the beginning of the year 1665, he lost a single patient in following the very same methods which he had pursued for the four preceding years with uninterrupted success. We likewise find him immediately changing his whole method of practice from this single miscarriage; and it is to be remarked that at that time he entertained no idea of the nature and change of epidemics, as may be seen by comparing his first and second publications in 1666 and 1668, with his succeeding one in 1676, which is the earliest production of his now commonly known, and in which he first demonstrates their variety.

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It was to being thus open to conviction, and to that nicety with which he scrutinised all his practice, that he owes his great and increasing reputation. Are we then to imitate his steps or not? I know that it will be said that in so great a city a physician need not make what will be called experiments, as among such a number of practitioners a sufficient variety of modes of practice will necessarily be seen to enable a person to chuse the most successful. But on the contrary it is in the country only, from physicians being more apart, that we can expect any variety of opinion or practice, whereas in large cities, where a great number of physicians have frequent opportunities of conversing together, the opinions and practice of the individual is gradually lost in those of the whole body, so that the great line of conduct of each becomes at length nearly the same in similar cases. This circumstance proves often highly prejudicial to mankind. The method of
practice

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practice gains such permanency and supposed infallibility as not to adapt itself, till after a long contest, to those changes which constantly occur from different constitutions of air or modes of life. Besides, the success of every practitioner being nearly the same, and as each sees his own through a magnifying medium, he becomes wedded to a practice which he thinks the best possible, his comparison being only with those who practise in a similar manner.

When a change has been first proposed in the method of treating any fatal disorder, numberless outcries have been raised against it. Now as the medical faculty had not seen it tried, it was not from a comparison of its success with that of their own they could draw the preference. Yet if they acknowledged their losing patients to whom they were called in the very beginning of the disorder, no proper defence could be made for

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for their persisting in their usual mode of practice, but their having seen and compared the advantage of every other with it.

The perfection of our art must consist in being able to cure every patient; and surely there is no other way of arriving at this, but by considering our practice as wrong when we lose one, and endeavouring to find a better method. But even in its present imperfect state few there are who know upon what it should be built, even as a conjectural art which some have called it. It is not enough that numbers have recovered who have followed a particular plan; because many will recover who follow a different one, even the most opposite to it. The practice of ascribing the recoveries to the method of treatment followed is the bane of our science. By this, persons of weak judgments have imposed the worst practice upon themselves and the world. Thus

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Sennertus recommends sweating in a particular stage of the plague, though he tells us not one in a hundred recovered who used it, and the physicians who give an account of the Marseilles plague carry the matter farther, by recommending a particular method of treating the two first stages of it, and yet gravely assuring us they never saw one who recovered by it. Such is the fate of physick when it falls into the hands of writers or practitioners who blame not their practice for any miscarriages which happen, but take to themselves the merit of every recovery.

But to bring this more home to the subject of the present chapter, Sir John Pringle allows that in the most favourable circumstances of the gaol-fever, he lost four out of thirty-nine patients. At Ipswich, above eighty out of near four hundred. In Scotland, near three hundred of this disease, though only about two thousand sick and wounded had been received into the hospital. At Holy Island,

Island, forty out of ninety-seven. At Newcastle, about the same proportion. At Feckenstein, near one half out of one thousand five hundred sick, besides the wounded from the battle of Dettingen. In the voyage to Ghent, above half of all the sick, and several of the remainder soon after their arrival. And in the first year, or 1742, we find that fevers were very common and less successfully treated than afterwards. Let me then submit it to every person's consideration whether Sir John Pringle's practice should be adopted or rejected.

Some persons who are satisfied with the truth of the doctrine inculcated in these pages may think it improper to be spoken by a physician, the world being already sufficiently free in criticising our science. But let the maxim be engraved on every person's mind, that candor can never hurt any profession, much less our's, which should be founded on the entire confidence of mankind. This must be
destroyed

destroyed by the slightest appearance of reserve, and it is to be feared we often think ourselves more cunning than we are, like children imagining we are perfectly concealed, because we have closed our own eyes. Concealment is the strong hold of quackery: let physicians ever disdain such a defence both for their opinions and practice.

When I wrote the sentence so frequently alluded to I little thought I should have been drawn into a defence of it, therefore left it for so long a time to stand or fall by its own merit. But the load of misrepresentation which I have experienced in consequence of it, induced me to seize the present opportunity to explain it.

The point in debate is simply and essentially, whether success be the sole and invariable test of good practice. And as to this the judgment of the world is so loud and strong as totally to pull down every other standard which theory and hypotheses

hypotheses have from time to time erected. Now that our practice should quadrate with this it is necessary that its success, if not absolutely perfect, should be the greatest possible; and how we are to be certain of this, except upon Sydenham's plan of trying a different mode whenever one fails, I must acknowledge I know not. It may be said that our practice will thereby be rendered fluctuating and uncertain. Where is the disadvantage? If for the sake of argument we allow the present method to be all perfect, what are we to think of those physicians who with great asperity opposed every improvement which we have now so wisely adopted? would it not have been better for mankind that their practice had fluctuated, and that they had sooner adopted these improvements? But if on the contrary we may be allowed modestly to suppose the present practice in many instances erroneous, I think I need scarcely hint the parallel to be drawn. Indeed

deed I consider uniform success as so much the test of the goodness of any practice, that, fond as I am of the bark and cold air in putrid fevers, whensoever I find them fail, I shall try some other method afterwards in all similar cases. This pliability I consider as more absolutely requisite from the assertions of the benevolent Sydenham. This great man expressly asserts that the same method of treatment which will cure a person of a fever in one year, will, when the general constitution of disorders is different, prove as certainly noxious. Can we have a stronger inducement to follow his example, and whensoever we lose a patient in a fever, to try another method with the next that is entrusted to our care. It has been by rejecting this evident proposition that our science has so long been deemed uncertain, whereas, the fault chiefly lies not in the art but the artist, who flies for its improvement to vague hypothetical reasoning, in which no two physicians have ever

ever perfectly agreed, and deserts the plain test of uniform success from a despair of attaining it. From an unwillingness to change old methods rendered sacred by the various foolish reasonings in their defence, arises the small improvement medicine has ever received from regular physicians. Indeed this appeared so strongly the case to the late humane Dr. Gregory, that he justly asserts, that medicine has received more improvement from that illiterate enthusiast Paracelsus, than from all the physicians who have lived since the days of Hippocrates, Sydenham alone excepted. Can there be given a more melancholy picture of our unreasonable obstinacy in adhering to unsuccessful modes of practice!

I should be sorry that what has been said upon this subject should seem to convey the most distant reflexion upon the medical faculty. Nothing can be farther from my intention than to insinuate that any gentlemen can trifle with the health

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or life of a person committed to his care. The humanity necessarily inspired by our profession would soon drive such ideas from the most unprincipled heart. It is an error of judgment which I mean to combat. An error implied in all systems, sanctified by almost all writers, and too much I am afraid followed by most practitioners. An open attack upon it must therefore be deemed the scheme of a Quixote. And if unsuccessful I shall be happy to have the attempt attributed to the same cause as many of his philanthropic schemes, although in the present situation of the world I am convinced it is much more profitable to be esteemed a knave than a fool.

I have now only to conclude, by sincerely praying that every physician who does not blame himself and his practice when he loses a patient in any disorder may be soon converted to the opposite opinion, as I know not a single truth, if this be not one, that he will thereby be-

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come a better physician, be more solicitous for the life of every person committed to his care, and find greater opportunity of calling forth all his feelings as a benevolent man.

F I N I S.